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THE ELY VOLUME;

OR,

The Contributions of our Foreign Missions

TO SCIENCE AND HUMAN WELL-BEING.

By THOMAS LAURIE, D. D.,

FORMERLY A MISSIONARY OF THE A. B. C. F. M.

And by the river upon the bank thereof, on this side and on that side, shall grow all trees for meat, whose leaf shall not fade, . . . because their waters they issued out of the sanctuary. — EZEKIEL xlvii : 12.

BOSTON:

AMERICAN BOARD OF COMMISSIONERS FOR FOREIGN MISSIONS,

CONGREGATIONAL HOUSE,

1881.

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Sacred to the Memory

OF

THE REV. ALFRED ELY, D. D., MONSON, MASS.,

ACCORDING TO THE DESIRE OF HIS SON,

THE HON. ALFRED B. ELY, NEWTON, MASS.,

Who made provision for

THE PUBLICATION OF THIS VOLUME

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PRINCETON THEOLOGICAL SEMINARY

INTRODUCTION.

A FEW confidential words between writer and reader, at the outset of the journey, enable them to walk together more pleasantly, especially if the way be long and difficult.

This volume had its origin in the same devotion to the kingdom of Christ that leads some to found lectureships for the better elucidation and defense of the truth. The late Hon. Alfred B. Ely inherited his father's love for the missionary work. He felt that the amount of scientific information given by it to the world during the last fifty years was greatly underestimated, and, therefore, made provision for the preparation and publication of this volume, to show what the missionaries of the American Board had done, especially for geography, philology, and archæology, not overlooking any contribution they had made to the advancement of human well-being. He hoped thus to interest some in the great work, through its incidental results, who had not yet learned to love it for its own sake.

The idea was originally suggested by the remark of one connected with a scientific journal, who, when Mr. Ely spoke about the debt of science to our missionaries, replied: "I was not aware that missionaries had ever done anything for science."[1] Other incidents show the need of such a work. Dr. Bliss, of Beirût, tells of an American clergyman passing through that city, who said to a friend: "Missionaries here seem to accomplish nothing." "You heard Dr. Thomson preach this morning, I presume?" "No, I did not know there was any service."

[1] As the impression prevails among some, that scientists, as such, are inimical to the missionary work, it may be well to quote several passages from the celebrated Charles Darwin. In his *Journal of Researches in Natural History and Geology*, in connection with the voyage of H. M. S. "Beagle," he says (Harper's edition, Vol. I, pp. 191–193): "My impression, derived from Beechey and Kotzebue, that the Tahitians had become a gloomy race, and lived in fear of the missionaries, I found decidedly incorrect. Of fear I saw no trace, unless, indeed, fear be confounded with respect. On the whole, it appears to me that their morality and religion are highly creditable. Many attack the missionaries, and the results of their labors, even more acrimoniously than Kotzebue did; but they never compare the present state of the island with what it was only twenty years ago, nor even with that of Europe at the present day. They only compare it with the high standard of Gospel perfection. They expect missionaries to effect that which the Apostles themselves failed to do; and as the condition of the people falls short of this high standard, the missionary is blamed, instead of being commended for that which he has effected. They forget, or will not remember, that human sacrifices and the power of an idolatrous priesthood; a system of profligacy unparalleled elsewhere; infanticide, a consequence of that system; bloody wars, where neither women nor children were spared,—that all these have been abolished, and that dishonesty, intemperance, and licentiousness have been greatly reduced by the introduction of Christianity. In a voyager to forget these things is base ingratitude, for should he chance to be at the point of shipwreck on some unknown coast, he will devoutly pray that the lesson of the missionary may have extended thus far. But it is useless to argue against such reasoners. I believe that, disappointed in not finding the field of licentiousness quite so open as formerly, they will not give credit to a morality which they do not wish to practice, or to a religion which they undervalue, if not despise." (Slightly abbreviated.) The man who pens such words is no enemy of missions.

In New Zealand, he describes the missionary settlement of Waimate, with its fertile fields, and adds: "All this is very surprising, when it is considered that five years ago nothing but the fern flourished here. Native workmanship, taught by the missionaries, has effected this change. The lesson of the missionary is the enchanter's wand. The house has been built, the windows framed, the fields ploughed, and even the trees grafted by the New Zealander. At the mill he appeared powdered white with flour, like his brother miller in England. When I looked at this whole scene, I thought it admirable. It was not merely that England was brought vividly before me, but rather the high hopes thus inspired for the future progress of this fine island." (pp. 207–208.)

On a later page (214), he adds: "I believe we were all glad to leave New Zealand. It is not a pleasant place. I look back but to one bright spot, and that is Waimate, with its Christian inhabitants."

"Then, did you hear Dr. Van Dyck this afternoon?" "You don't mean that he preaches in addition to all his other work!" "Yes, and he had a large audience, too. Have you visited any of their schools?" "Schools! have they schools, also? I am glad to hear it." "Have you looked in on their press and publication rooms?" "What! have they a printing establishment besides?" "Yes, and it keeps twenty men constantly busy." This may be rather hard on the clergyman; but when missionaries are too busy to speak for themselves, it shows the need of letting men know what they are doing.

It was well this American clergyman fell into good hands. In some places foreign residents have little sympathy with a missionary. Their aims are so unlike his, that he would be in the way of their success, just as their lives hinder his; and, while he is not given to complaining of them, they are sometimes not slow to slander him. The last place to look for some editors, unfriendly to missionaries, would be either in mission churches or mission schools. As Mr. Griffis says of some merchants in Japan, "They are unable to comprehend the object of a missionary, and yet some of the best work in the enlightenment of Japan is done by missionaries. They were the first teachers and counselors of the people, and the ripe fruits of scholarship that open up the Japanese language to the world are from them." [1]

A correspondent of the New York *Evening Post*, writing from Eastern Asia, says: "When a man speaks ill of missionaries it is well to look at the life of the critic, to see what there is there which religion condemns. There may possibly be good men who speak of missions as a failure, and missionaries as imposters, but I have not found them, though I have met many rakes, drunkards, and blackguards who have a thorough contempt for missions." [2]

For a time it was hoped that the venerable Dr. Anderson would be able to prepare this volume, after he should have finished his histories of missions, and when that hope failed, the work was assigned to Rev. E. Strong, D.D., of West Roxbury, Massachusetts, who labored on it for several years in the intervals of pastoral work, but he felt constrained to give it up at the close of 1879. The present writer was then requested to undertake it; but to do justice to such a task, one must work out the idea as it lies in his own mind, and so, while availing himself of the valuable material got together by his predecessors, he had to begin to build from the foundation. He found no lack of matter, but the difficulty was how to use it to the best advantage. A mere catalogue of what had been done by our missionaries would neither suit the scientist nor interest the general reader, while to present their work in full would require an encyclopædia rather than a volume; so the attempt has been to present a general view of the whole, and illustrate the several parts by specimens. But the illustrations had to be so condensed, that if some miss quotation marks where they expected them, the reason is that the process of condensation has been carried so far it was hardly honest to use them, yet the references will enable the student to investigate the original authorities as thoroughly as he may desire.

It has been exceedingly difficult to meet the requirements of the scholar and at the same time interest the general reader. Had this last been the sole object in view, whole chapters would have been left out, *e. g.*, those on meteorology and on ethnography, and the list of scientific topics discussed in the *Chinese Repository* and *Indian Evangelical Review* had shared the same fate. As it is, many scholars will be disappointed by the meager contributions to their own special department of science, while others may complain of the large amount of dull reading.

The writer contributed a chapter to the volume in 1869; but since it came into his hands, in January, 1880, that chapter has been divided into three, and additions made to them all up to the moment of going to press. The careful reader will sometimes find facts where they do not really belong, because some chapters were divided after the book was written, and all the matter pertaining to some topics had not been removed to its proper place before the stereotyper had cut off every avenue of approach.

The chapters relating to China owe much to the full and accurate knowledge of the Hon. S. Wells Williams, LL.D., and that on Bible translations is much indebted to the careful revision of Rev. E. W. Gilman, D.D., secretary of the American Bible Society.

Let no reader expect to find the latest statistics, especially in relation to Japan; for after altering them repeatedly, the figures had to be changed to correspond with different statements

[1] *The Mikado's Empire*, p. 345.

[2] *Missionary Herald*, 1876, p. 139.

in the same number of the *Missionary Herald*,[1] and long before this page reaches the reader, other changes will be needed to keep pace with the rapid movements of that interesting people.

The part of the volume that has cost the greatest labor and will be of the least interest to readers in general, is the list of books published by the missions. In spite of a laborious correspondence, it is very incomplete, though it is hoped that missionaries will yet furnish the data for more accurate statements. In this connection special thanks are due to Mrs. Isabella H. Bliss, of Constantinople, and to the Rev. S. R. Riggs, of the Dakota mission, for their valuable aid in this department.

The more minute the detail in a table of contents, the greater is the confusion. For this reason, the subject of each chapter has been expressed, as far as possible, by a single word; but it is hoped that the reader will find in the index just such help as a student loves in a book of reference.

The thought has sometimes been discouraging that the book is too miscellaneous to be read. Was it presumption at such times, to find comfort in the thought that THE BOOK is made up of prose and poetry, history and prophecy, truth revealing God, and wise sayings gathered from earthly experience; and so go on filling up this humble herbarium from far off forests and remotest shores?

If any think that too much has been said about Presbyterian missions, they must remember that it is only a few years since some of theirs were ours. The writer was a missionary under that Board in what are now Presbyterian missions among the Nestorians, and in Syria.

It is due to the officers of the Board to state that, while they publish this volume, the writer alone is responsible for its contents. The entire plan and arrangement have been left with him. Perhaps if they had supervised him more, the work had been better done; but their hands were too full of work to hold any more.

It is some indication of the connection of missions with secular things that, with one trifling exception, on page 315, every illustration in the volume has been taken from publications connected with the work of the Board.

Papal violence threw down the wall that enclosed the graves of Dr. Grant and his associates, on the hillside near Mosul, and so shattered the stones erected to their memory, that to save them from further injury they had to be buried in the graves over which they had been set up. But it was given to the writer to erect a memorial to them in 1853,[2] that is safe from such violence. Again, in 1863, he had the rare felicity of putting on record the remarkable labors of Miss Fidelia Fisk,[3] and now that he has been called unexpectedly to this work, he can hardly expect another repetition of such favor; but he desires no higher heaven than to serve the same divine kingdom where there will be no imperfections to become more conspicuous the more we strive to remove them.

They who love the missionary work for its own sake may be grieved that the spiritual side is not made more prominent in these pages; but they must remember that they were written to record its incidental fruits. The scientist, on the other hand, will miss his scientific nomenclature, and the reference of the facts brought forward to their proper place in the more advanced discussions in science, but he, too, must bear in mind that the writer is not a scientist but a missionary.

May the writer also record the conviction that has grown stronger all through the work, that these incidental results of missions do not constitute their chief glory. That lies in bringing back a lost world to the knowledge of its Divine Redeemer; and the fullness of that glory can be seen only in the light that is round about the Throne.

Providence, Rhode Island, September 1, 1881.

[1] 1881, pp. 59 and 71, one of which gives sixty-four church members, the other sixty-seven; also pp. 5 and 56, where the native pastors increase from eight to ten.

[2] *Dr. Grant and the Mountain Nestorians.*

[3] *Woman and her Saviour in Persia.*

PRINCETON
THEOLOGICAL

I.

CONTRIBUTIONS TO GEOGRAPHICAL SCIENCE.

A MISSIONARY SOCIETY may be formed in response to a Macedonian cry from some interesting field of labor, but, if it is wise, it will not establish a station till it has looked over the ground carefully. It must ascertain, not only the center of the largest population, but the center of greatest intellectual activity; not only the place most easily reached, but of the greatest mental accessibility. Then the cost of living, healthiness of location, and readiest access to other parts of the field, must all be taken into account.

Afterwards, as other fields open, these also must be explored. It will not do to depend on rumor, or the report of observers unfamiliar with missionary work. Men well acquainted with such service must search into the nature and extent of the openings for the Gospel, the size of the fields, and their prospects for the future, before anything can be done intelligently, or with such promise of success as shall enlist the interest of the churches. Hence, thorough exploration of the field is one of the first requisites of a successful mission; and as missionary work begins here, it is fitting that this volume commence with an account of missionary contributions to Geographical Science.

The investigations now being made by the American Board preparatory to a mission in Central Africa furnish a good illustration of such exploration, and its value when well done. The admirable paper by Dr. J. O. Means, read at the annual meeting of the Board in 1879, brings together from all quarters all accessible information about the field; and the fact that, out of the sixty-one names quoted as authority for his statements, forty-four were connected with missionary work, shows how much we are indebted to missionaries for our knowledge of foreign lands. Of the paper itself, it is sufficient to say that it has just been pronounced by an English authority to be "the best thing ever yet written on Africa."[1] Quotations would be made from it were it not for the hope that a volume will appear devoted to our new work in Africa.

Missionaries have always been contributors to geographical science. As early as the thirteenth century they collected information about Central and Eastern Asia. Rubruquis, a Franciscan, A. D. 1253, traveled further east than any European before him. Jesuits traveled in Central Asia and China for two hundred years, and described the topography and natural history of those countries. Sometimes they were too credulous, at others they did not

[1] Letter of Rev. N. G. Clark, D.D.

observe accurately; but they were always busy. They prepared the best map of China then known, reported the manners and customs of the people, their language and literature, their commerce and manufactures. They wrote of botany and zoölogy, of entomology and precious stones. They published a Chinese encyclopædia in one hundred volumes, containing five thousand and twenty articles — a complete digest of Chinese literature, now in the British Museum.[1]

Spanish and Portuguese missionaries contributed much to our knowledge of Africa and America. They wrote the first accounts of Congo and Abyssinia. Father Pays describes the sources of the Nile as minutely in the beginning of the seventeenth century as Bruce did near the close of the eighteenth. Jesuits first explored and described large portions of South America.

The Danish missionary, Hans Egede, and his grandson, give us our best accounts of Greenland. Dr. E. Henderson has done the same for Iceland, its geography and geology, its history and its poetry. The journeys of Marsden in Australia and New Zealand; the voyages of Wilson and of Tyermann and Bennett in the Pacific, and the travels of J. Campbell in South Africa, were valuable contributions to geography fifty years ago.

Yet, though all might fall below the standard of the present, the contributions of Protestant missionaries were both richer and more reliable than those of Papists.

The very term "geography" has in these days enlarged its meaning. A modern writer says: "It surveys the platform on which all human interests play their part, and makes all knowledge tributary to itself. It embraces all the natural sciences, geology and mineralogy, botany and conchology, zoölogy and meteorology — whatever pertains to land, or sea, or air." Ancient geography never ventured into such fields. Physical geography did not become a distinct science till 1848.

During the last half-century great progress has been made. Our own vast interior has been explored, Central Asia traversed, and the river systems of South America surveyed. The Dead Sea has been navigated; the source of the Niger ascertained. A steamer has ascended the Tshadda to Bornou. The desert of Australia and the frozen shores of Siberia have been examined. The charm of the study is now appreciated, and travelers have accumulated a large store of facts; still, they do not dwell among the people they describe, nor do they know their language; hence their misapprehensions and mistakes. But educated missionaries describe their own homes, and are masters of the vernacular. They are, therefore, more reliable in their statements. They study the people, so as to make the most of them for Christ, and their language, as the weapon of their warfare. They do not hurry through a land, intent on the next railroad connection, but make it their permanent abode; and while a people like the Chinese often purposely misinform ordinary explorers, the missionary masters all the information they possess.

Just as our meteorological signal stations from Florida to the St. Lawrence, and from Calais to San Francisco, flash their observations to the central office

[1] *Bombay Guardian*, October 26, 1878.

at Washington, so four thousand missionary stations, six hundred of them occupied by our own Board, supply geographical information to scholars at home.

It was said of Dr. H. Lobdell, that he was at once geographer, antiquarian, philologist, and naturalist. His associate, Dr. D. W. Marsh, was impressed with his ceaseless activity. He was almost always reading or writing. He traced the route of Xenophon and his ten thousand, and followed the road of Alexander to Arbela. He pondered the problems suggested by Layard's discoveries, and questioned all classes on every topic of Biblical geography or Oriental customs. With one large note-book on his desk, and another in his pocket, he was constantly gathering facts.[1] Such men, traveling so much, as missionaries must in the prosecution of their work, cannot but contribute to geographical science. Rev. Dr. William Adams, of New York, says: "I believe that more has been done in philology, geography, and ethnology, indirectly, by our missionaries, than by all the royal and national societies in the world that devote themselves exclusively to these objects;" and the *Princeton Review*[2] says: "Our missionaries have rendered more real service to geography than all the geographical societies of the world."

Dr. C. Hamlin says: "Hundreds of educated men have given accounts of observations in many lands, describing countries, climates, and modes of travel, nations and races, their physical, mental and moral characteristics, their social condition and habits, their religion, education, and government, their industries and modes of subsistence, involving a large contribution to our geographical knowledge."

Carl Ritter, "the prince of geographers," confesses that he could not have written his *magnum opus*, the *Erd-kunde*, without the aid of material collected and transmitted by missionaries. "The *Missionary Herald*," he says, "is the repository to which the reader must look to find the most valuable documents that have ever been sent over by any society, and where a rich store of scientific, historical, and antiquarian details may be seen."

The Rev. Dr. Anderson says: "As the work of the missionary is generally undertaken for life, and as he must cultivate intimacy with the people, he has advantages for research such as no other class can have, and his statements are more trustworthy. I can hardly conceive of their being tempted to speak of mountains, rivers, plains, climates, governments, languages, and even religious dogmas, otherwise than correctly." Thus, as has been well said, "Geography and Philology are largely missionary sciences." At the annual meeting of the Oriental Society in 1867, there was a discussion on the wisdom of missionaries engaging in literary or scientific investigations, in which Dr. Anderson, Dr. Pitkin, Prof. Whitney, and others took part.[3] The opinion was unanimous that such investigations, carried on as opportunity offered in the intervals of missionary work, were important for the culture and mental activity of the missionary, and for his usefulness both abroad and at home; and reference was made to the immense amount of valuable contributions to knowledge made by missionaries, and to the honorable estimation in which they were held on account

[1] *Memoir*, 410. [2] Vol. XXXVIII, p. 622.
[3] *Journal American Oriental Society*, Vol. IX, p. xvi.

of such labors. Prof. Whitney says elsewhere: "I have a strong realization of the value of missionary labor to science. The American Oriental Society has been much dependent on them for its usefulness. There would hardly be occasion for the society at all, but for them. I have heard the manager of one of the great Oriental societies abroad speak with admiration of the learning, good sense, and enterprise of American missionaries, and lament that those from his own land were so decidedly their inferiors."

Mr. L. H. Morgan says:[1] "No class of men have earned a higher reputation as scholars or philanthropists than our missionaries. Their contributions to history, ethnology, philology, geography, and religious literature form their enduring monument."

Nor have the officers of the Board at home been lacking in their contributions to geographical science. Besides giving space in the *Missionary Herald* to strictly geographical information furnished by missionaries abroad, they have themselves also furnished articles involving no small amount of research in that line. The preparation and publication of missionary maps was begun at an early period in the history of the Board. The first map that appeared in the *Herald* was one of the island of Hawaii, engraved on copper plate, as early as January, 1826. The editor says (page 27): "Some acquaintance with the topography of a country is needed to give missionary information its due interest and effect." As the object was to illustrate the comparatively small regions occupied by particular missions, these maps were drawn on a large scale, and went into details not to be found elsewhere. Nor have they been content with one map of the various fields, but new ones have been prepared from time to time, as more thorough exploration superseded those in use. Some of the most accurate maps of Turkey, China, and Japan, have been those prepared to illustrate the operations of the Board in those countries; while the region round the Gaboon river, the valley of the Columbia, the vicinity of Canton, of Bangkok, portions of Macedonia and Borneo, the Bosphorus, and the neighborhood of Broosa, the country occupied by the Marathi mission, the Nestorian country, the Central Turkey mission, and others, may serve as specimens of the accuracy of their maps in minute details. The fact that in most cases the original draft was prepared by those on the ground, and familiar with the localities described, accounts for their unusual reliability.

A map of the district of Madura is here cited in corroboration of these remarks.[2] The writer has used in preparation for the monthly concert of prayer as many as three different sets of maps prepared for that purpose by the American Board.

And this suggests another phase of the contributions of our missions to geographical knowledge: that science may be advanced in two ways; either by the addition of original material, or by the speedy and extensive dissemination of the information thus obtained, among the people. Now, while missionaries at the front send home their hard-won contributions to geography, the Board at home — to put it in the mildest form — moves abreast of every

[1] Preface to Smithsonian *Contributions to Knowledge*, Vol. XVII.

[2] See *Missionary Herald*, 1874, p. 1.

other agency in popularizing the information thus obtained. The ponderous tomes of the *Encyclopædia* must wait — it may be many years — for the issue of a new edition, before it can embody the results of recent discoveries. Even the school geography, direct as is its contact with the masses, cannot be changed often enough to keep pace with the rapid advance of discovery; but the maps issued by the American Board go at once into the monthly concerts throughout the land, disseminating among the most intelligent classes the latest geographical as well as missionary intelligence from the ends of the earth.

Take Africa as an illustration. How many encyclopædias, or even school geographies, contain the results of the explorations of Livingstone, Cameron, Stanley, and others in the interior of that continent? The costly volumes of the latter are in the hands of comparatively few; but the map of Central and Southern Africa issued by the Board, at once a marvel of accuracy and cheapness, carries the discoveries of these travelers in the most striking form before the eyes of reading and thinking congregations all over the land, while they are constructed so as to afford room for the insertion of any additional information from our advance line of pioneers.

Mr. G. M. Powell, of the Oriental Topographical Corps, in a paper read before the American Institute, 1874, says:[1] "Probably no source of knowledge in this department has been so vast, varied, and prolific as the investigations and contributions of missionaries. They have patiently collected and truthfully transmitted much exact and valuable geographical knowledge, and all without money and without price, though it would have cost millions to secure it in any other way. This, with their work as a civilizing and commerce-creating agency, is so much net gain — a parasitic growth on the Tree of Life they go to plant."

"Much of discovery in regions difficult of access, credited to travelers and explorers as their own, would be stated more correctly as simply forwarded through them by these missionaries, whose versatility, originality, and executive ability, not only in their own work, but in the promotion of geography and kindred sciences, need no praise."

Our missionaries to the Pacific have proved that thousands of islands there were settled by the same race, through simply reducing the languages to form, and bringing them within the range of philosophical investigation. The Ethnological Society in New York rarely meets without reading papers from missionaries on this topic.

One writer says: "Missions enable the German in his closet to compare more than two hundred languages: the unpronounceable polysyllables used by John Eliot, the monosyllables of China, the lordly Sanskrit and its modern associates, the smooth languages of the South Seas, the musical dialects of Africa, and the harsh gutturals of our own Indians." And another: "But for the researches of missionaries, further India would be, most of it, *terra incognita*."

Their outposts are stationary, yet scattered over the earth like the stars above us. This permanence of location, their numbers, and their scholastic training insure a great amount and a good quality of scientific work.

[1] See *Missionary Herald*, 1875, p. 120.

Rev. W. Warren[1] says: "I have seen a letter from Herschel, the celebrated astronomer, thanking Rev. D. T. Stoddard, of Persia, for important meteorological discoveries. He pledged to Mr. Stoddard a vote of thanks from the Royal Society."

It now remains to see how their labors justify such eulogiums. The operations of the American Board, organized in 1810, on our own continent, began with some of the Indian tribes. In 1817 Mr. Kingsbury went among the Cherokees. He, his successors and co-laborers among the Choctaws and other tribes published in the *Missionary Herald*, from year to year, accounts of the country and people, containing much geographical information.

BUENOS AYRES.

Rev. J. C. Brigham and Rev. T. Parvin were sent to Buenos Ayres in 1823. Mr. Parvin remained, but Mr. Brigham, according to instructions, crossed the continent to the western coast, visited the republics there, and returned through Mexico in 1826.[2]

Mr. Brigham's description of one of the coaches in which he traveled might serve for a symbol of Buenos Ayres civilization. It was a ponderous old Spanish vehicle, that looked as though it dated from the days of the conquest. To secure it against damage on the journey, spokes, shafts, springs, and under-rigging were wound round with strips of raw hide, as a sailor serves[3] parts of the standing rigging of his ship. Two entire hides were then spread over it, to exclude sun and rain, and held in place by numerous strips lashed to the rigging below. Other hides were then suspended below the body of the coach to receive the numerous pots and pans for cooking, and the axes, saws, chisels, hammers, nails, and ropes that might be needed for repairs. Then several spare axles and other timbers were lashed in front, under the boot, to meet emergencies, and, to crown all, some thirty muskets, blunderbusses, swords, and pistols were lashed along the sides with more strips of raw hide, so that scarce a square inch of surface was free from them. This *outré* conveyance was drawn by six horses, whose only harness besides the bridle was a belt or surcingle, to which was attached a long twisted rope of raw hide, fastened at the other end to the coach. Rude as the whole outfit appeared, it moved very swiftly over the level pampas, so that our travelers had no ground of complaint on the score of speed.

ARAUCANIANS.

His account of the Araucanians in Southern Chili is too interesting to be passed over. Their country lies between the river Biobio and Valdivia, and reaches from the Andes to the Pacific. It is about two hundred and forty miles long by one hundred in breadth. It is difficult to get at their numbers, as they do not live in villages, but are scattered along the valleys and on the banks of the rivers. Though some estimate their number at fifty thousand, others make it only half as large. They are the most intelligent and warlike of the Chilian Indians, divided he says, into numerous tribes — another writer says, into four large tribes — under chiefs called toquis, who are independent of each other, like our several States, but confederated for the common defense. Each of these tribes is composed of five divisions governed by apo-ulmen, and these, again, of nine subdivisions governed by an ulman subject to the apo-ulmen, as they are to the toquis. These various chiefs are hereditary in the male line. The supreme power of each tribe is vested in a general council of the ulmen, which meets annually, like the old Icelandic parliament, in the open air; but their extreme love of liberty hardly brooks even this authority. Indeed, the chiefs are little more than leaders in war, for they receive no taxes, and the right of private revenge limits their civil authority. Each family occupies the same lands which its ancestors have done for many generations. Though centuries have passed since

[1] *These for Those*, p. 267.

[2] See *Missionary Herald*, 1825, pp. 44-48, 72-78, 176, 321-326. Do., 1826, pp. 42-47, 73-80, 111-116, 183-187, 271-273.

[3] Winds round with rope yarn.

they were invaded by the Spaniards, they are the same athletic, manly race that they were then. After centuries of war, they remain unconquered and invincible. Their glory is in their military strength, and the army is the only place of honor. Every healthy and vigorous man belongs to that, and for that reason is exempt from labor, which is the portion of the infirm, the aged, and the women. The men make and exercise themselves in the use of their arms, and in athletic games. Sometimes the men of one valley challenge those of another to a game of ball, and, though many are maimed and some killed, yet quarreling is infrequent. Each man is assigned one kind of weapon. These weapons are the lance, the arrow, the sling, and the war-club. A few, and only a few, are armed with muskets. The lancers are on horseback, and sometimes the archers also. To the strongest is assigned that most effective weapon, the war-club, and this is counted the most honorable. It is massive, about three and a half feet long, with projecting knobs pointed with a sharp stone or bone. One writer says that when they take the field they carry parched meal with them for provision, send out scouts, and dig entrenchments when needed. They charge in well-formed lines, and fight with a deliberate courage unknown to other Indians. When they learned the inefficiency of their old weapons against muskets, they advanced so near at the outset that, after receiving a volley without flinching, they could rush to close quarters and decide the battle with their swords and clubs.

When war is imminent, some aged chief calls a meeting of the ulmen, who choose a commander-in-chief; he then sends an arrow dipped in blood to all the rest, who come to the rendezvous with their forces. Their courage may be learned from the following incidents. A young man condemned to death walked calmly, with unflinching step, to the appointed place. The executioner cut the scalp from his head, pierced his throat, and then his breast. He fell, but instantly rose again and leaped high in the air, then expired only after herculean struggles, that compelled a German military officer to leave the scene, unable to endure it; but the Indians sat unmoved. In another case, a Chilian officer had been killed by a large party, and an envoy was sent to demand an explanation. The ulmen met, and after inquiry decided that the whole party had committed crime; and one hundred men were at once arrested, brought into the open field, and put to the knife in presence of the embassy and a large multitude, without a murmur from the victims or any show of sympathy from the spectators.

They seem to be the finest race in the New World. They have the germs of civilization possessed by the Mexicans and Peruvians, without the ferocity of the one or the apathy of the other. They are the only Indians that can look a white man fully in the face. They pierce one with a look that says, "We are the equals of any man or set of men on the earth." Other Indians, when asked for a drink of water, bring it with a cringing, slavish air. These are accustomed to reply, "There is the water; go and help yourself." Though not lacking in hospitality, they will submit to no act which might imply that they were made to serve. Their faces are unusually large, with well-formed mouth and nose, and eyes remarkable for brightness, yet frank and full of nobleness.

They believe in one Supreme Being, called Billan, and in a future life; also that on the other side of the water a large, beautiful island will receive them at death. Their sacrifices are few and simple. The most common is wine, which they throw into the air from a small cup, saying, "This to Billan." Animals are rarely offered except before war or in some great peril. Then the usual victim is a colt. Of this they first take out the heart and entrails, and sprinkle the blood in the air; then they divide the entire animal, entrails and all, among themselves, and devour it. They believe in many subordinate spirits, good and bad; especially an evil one named Eponamon, who inflicts disease. They propitiate him also by sacrifice. Sometimes they think he takes possession of a child, and then they either kill or sell it to the Spaniards; but they will on no account become Papists. Not long before Mr. Brigham's visit, they killed two friars who attempted to proselyte them.

When a young man likes one of the opposite sex, he often visits her, and treats her with marked attention, though without speaking a word of his intentions, till, either at night or in the absence of her parents, he seizes and carries her to his own home. There he treats her for several days with great affection, seeking to make her contented to remain. If he fails in this, he must return her in safety or incur a terrible retribution. If he succeeds, her relatives are invited to visit her. They find her decked in all the glory of feathers, shells, rings, and

other ornaments. Her father is presented with horses and cattle, her mother with new dresses, and all the rest of the family with appropriate gifts. Her sisters usually receive a new tradelonko,[1] and her brothers a flaming red new bow and arrow; and, after a splendid feast, lasting several days, she is his bride. Polygamy exists among them, though few have more than two or three wives. The great cost stands in the way of having many, and frequent domestic broils — for all must live in the same house — still further discourage the practice; so unmarried girls are cautious about being stolen by a man who is already married.

They assemble in the house when a death occurs, talk of the virtues of the departed, and sometimes make it the scene of noisy revelry, as well as mourning. The men, before leaving, deposit the body in a spacious grave, with his clothes, arms, and provisions, not forgetting their favorite "chica";[2] indeed, everything they think will please him in the happy island.

They have a confused tradition of the deluge; believe in omens and divinations, but have no temples or idols. They divide the year into twelve months of thirty days each, and add intercalary days. They are to-day, in habits, feelings, and mode of life, essentially as Valdivia and Mendoza found them more than three hundred years ago. They glory in the perfection of the customs handed down from their ancestors, Colocolo, Caupolican, and Lautaro. Intemperance is their distinguishing vice. They are shrewd and eloquent in debate, and more gifted than other Indians. They prefer death to foreign domination, and teach their children that, while other Indians have been enslaved, they are unconquered, and the bravest people in the world. They are strict in observing their public treaties, and punish any breach of them with terrible severity. Too much cannot be said of their valor and patriotism, but there is little else in them that is attractive. Yet the record of their courageous defense of their liberties must interest Christians in making them acquainted with the liberty wherewith Christ makes free.[3]

PATAGONIA.

In 1833, Rev. Titus Coan and Rev. William Arms were sent to explore Patagonia as a missionary field; and as little is known of that region, a brief digest will be given of their observations, so far as they fall within the scope of this volume. They were there a little over two months, from November 14, 1833, to January 25, 1834, unacquainted with the language, and without an interpreter; yet in that brief space they obtained much valuable information.

Though in that latitude November corresponds to our May, on landing, they saw high hills capped with snow, and the whole landscape was cheerless. Not a tree or field was to be seen; only stunted thorn bushes, some bearing a small yellow blossom. There was no village, nor even a house. The hills were sandy and bare, and the plains, though covered with a rich, black soil, produced nothing but tall grass and wild celery. Granite boulders were scattered here and there, and there were many marshes and small ponds, with aquatic plants; but no rivers were to be seen, though there are a few flowing from the Andes to the Atlantic. Flocks of geese, ducks, and gulls were found in the ponds, and small birds — among them the curlew and some songsters — flitted among the bushes.

The missionaries pitched their tent among those of the natives, which are made of guanaco skins sewed together and supported by poles, leaving the east side open, where they build their fires. The interior is divided into stalls by skin partitions, according to the number of families that occupy it. Their only furniture consists of a few skins to sleep on, a large skin bag for a water pail, and a smaller one for a cup, with a few stones for roasting meat, and a bundle of sharp sticks with which to fasten skins to the ground in drying them.

The natives are from four and a half to six feet high, with straight limbs, plump, and well formed. The women are smaller, and not so well formed as the men. As to clothing, the arms and breast are bare, while a loose mantle of guanaco skin is thrown over the shoulders, and bound round the waist with the bolas. The hair, black and coarse, is parted in the middle and hangs down over the shoulders, bound by a narrow fillet round the head. Their color is a light olive, but they paint their faces with black and red or dark-brown colors, and stripe their arms and legs with white. Their cheek bones are high and broad, giving the face an angular aspect. The

[1] Head-dress made of beads, shells, and feathers.

[2] Beer, from maize.

[3] *Missionary Herald*, 1825, pp. 323-326.

men have no beard, as they pluck out both their beard and eyebrows. They are fond of ornaments, wearing bracelets and anklets of beads; and some thimbles given to them were at once bored and hung round the neck, while the needles were fitted into handles, to be used like awls. Some of them wear boots made of the skins of horses' legs, stripped off whole and transferred to those of their masters. As may be conjectured from this account, the sexes are not distinguished by their dress. The women do most of the work, while the men lounge and look on. They are all indolent and filthy in their habits. Few of them ever wash their faces, and a crowd looked on very much amused to see their stranger guests wash their clothes — a process they had never heard of before. Flesh is their only food. They have no bread, only as now and then they get a morsel from passing ships. When they kill guanacos, they tear out the entrails, and eat them warm from the carcass, not so much from the pressure of hunger as because they count them a luxury. Even children eat the most offensive parts of the intestines, unwashed as well as raw.

Their domestic animals are the horse and the dog. The latter are mere skeletons, as their masters leave them little besides the blood and bones of the animals they kill; and the horses used in hunting are also loaded mercilessly whenever they move, so that sometimes they are literally crushed down by the burden. Nor are these their only uses. When guanaco is scarce, one of the horses tied near every tent is shot with an arrow, and eaten, all except the skin, bones, and hoofs. Some of them also keep a few hens, but these are rare.

A few of them have guns, though they do not use them very skillfully. The bow and the bolas are their principal weapons. There were perhaps half a dozen home-made blankets in the country, made from the wool of the guanaco, spun by the women, and woven in a most primitive way. The loom consisted of two poles, one above the other, to which the ends of the warp were tied, while the woof was inserted by means of a stick and ostrich feather, pulled out and re-inserted by hand at every separate thread. No wonder two weeks were consumed in weaving one only four feet square.

It is hardly necessary to say that a young man purchases his bride from the father of the young woman, usually for a horse or some mantles; and after this, there is no more ceremony than the feast to which the bridegroom invites his friends to gormandize and jest. Yet even this is not the worst. The wife is sold again at pleasure, so that a man not seldom has six or seven wives in succession.

Pulmonary diseases are the most prevalent, as might be expected from the climate and their mode of dress; and the sick meet with very little of either sympathy or attention. The missionaries saw a man apparently dying, and yet no one went near him.

Their only doctors are conjurers, who howl, blow, scream, and shake their rattles like their representatives among our own Indians. Their principal duty is to bury the dead — in a sitting posture, with the feet drawn close up to the body, and the face to the east. They tread down the earth over all, and go through a set mourning, after which the household utensils of the deceased are buried, and his horses and dogs are killed, so that no memento of him remains; no mark is even left to designate the grave.

Though Messrs. Coan and Arms tried every means to discover it, they could not detect among them the slightest idea of a Creator. They believe that after death the good go to a land of perpetual sunshine, with pleasant houses, beautiful fields and horses, where hunger and thirst are unknown; while the bad descend to a wretched land of darkness and thorns, where is constant quarreling and distress.

They are inveterate beggars, teasing for the last morsel of food that is in sight; and yet some of them were very kind to their guests, ready to share with them their last piece of guanaco or horse-flesh. So, also, while some stole, one motherly old woman never rested till the stolen axe, hammer, or whatever it might be, was restored to its owner.

They were generally kind and good-natured; but Mr. Coan draws a picture of the chief's wife which even a patient man would pronounce unbearable. Disgustingly filthy, she begged all she saw, tried to force him to open every trunk and exhibit all its contents, and, failing in this, struck their lids furiously with her clenched fists. At meal time she brought a squad of children to make her begging more resistless, peeped into every dish, and, if she and her harpies were not fed from it, thrust her filthy hand even into soup, and dealt round among

them whatever it brought up; and this, just as much when she was filled to repletion as when she was hungry. Her own people also suffered from her wrath. The host of the missionaries was a very amiable and intelligent young man, but the fact that they were his guests rather than hers, so that she could not have so much opportunity to fleece them, excited her anger so that she dashed into his face and eyes, striking, scratching, tearing off his ornaments, and pulling out his hair, bringing on a general *mêlée*, in which many a dark face was streaked with blood as well as paint.

Another chief, also a woman, though she received the missionaries kindly when they visited her, yet avowed to the captain of the vessel that took them away her intention of plunging her knife into the heart of Mr. Arms; so that the captain detained her till the boat containing Mr. Arms had left the shore.

The natives sought rum and tobacco in exchange for their skins, more than anything else; and though their morals were foul enough before, sailors did not improve them, but left them a legacy of disease and death. They are also inveterate gamblers, some of them using English packs of cards in addition to their own games; and the only entire English sentence our missionaries heard among them was an oath.

They had a strange and most intense dislike to books and paper, said to have originated in the death of numbers of them from small-pox introduced by some old papers.

The missionaries learned that the Andes were impassable, owing to deserts of salt and extensive thickets of thorns in the interior, besides the scarcity of food; while the mountains themselves shot up into the region of perpetual snow, with no available passes, even should the desperate traveler succeed in climbing over the sharp, rough rocks that form their base.[1]

NORTHWEST COAST.

Rev. J. S. Green explored our northwest coast from 52° to 57° north latitude, or from Monterey as far as New Archangel. He was engaged in the work from February 13 to October 18, 1830, going up and down the coast in a merchant vessel, and stopping a few days in a place. We give a brief *résumé* of his account of the northern portion of the territory visited. He describes the climate as cold and wet, the rains frequent and excessive, and the air often so thick with moisture that they could hardly see the adjoining shore. This is generally abrupt, rising at once from the water into mountains crowned with snow, and heavily covered with forests of spruce and hemlock. The garden of the northern portion is Queen Charlotte's Island, where the soil is rich, and no hill is seen for a distance of forty miles. With this exception the country is hard and cold. He found as many as ten tribes along the shore north of California, numbering, all told, about fifteen thousand. Of these, sixty-five hundred speak the Sitka language, which is very soft and musical; fifty-five hundred speak the Nass, which is rough and harsh; and three thousand the language of Queen Charlotte's Island, which is the language of commerce. Of this he compiled a vocabulary, containing seven hundred words, but had not time or opportunity to be more thorough.

The natives have the characteristic Indian features and hair, and are well-built and athletic. Their dress generally consists of a blanket, under which the women wear a gown; and a few of the men don English clothes. All are excessively fond of ornaments, wearing them in the nose as well as ears, with a profusion of beads on the neck and ankles. They paint the face, using, when better material fails, a mixture of a kind of clay and soot. The steetgar, or lip ornament, peculiar to that coast, is described minutely, from the first puncture of the lower lip to the insertion of the full-sized steetgar. With all their ornaments, they are intolerable slovens, with a fixed aversion to water as an external application. Their hair is full of rancid fish oil, and their blankets alive with vermin and foul with filth.

Their homes are generally hovels, without door, floor, chimney, or window; though a few have good houses, with a short mast set up in front, and elaborately carved. The houses are built of slabs, set in the earth endwise, and the roof, slightly sloping, is covered with the same material.

The men are industrious, hunt, fish, and build their houses, while the women take care of

[1] *Missionary Herald*, 1834, pp. 376–381, 397–402, 429–432. Do., 1835, 37–41.

the provisions, make garments and hats from a kind of grass, and weave their blankets. In making war canoes, and furniture for their houses, the men exhibit considerable skill.

They are shrewd at a bargain, and have intellects of good capacity, but are intolerably self-conceited, selfish, arrogant, and overbearing. They manifest no sense of obligation, and show no gratitude for any favor; indeed, kindness only increases insolence. They are quite shameless in begging, resenting any refusal of the gift they demand, as a personal injury. They show an utter disregard of truth, and are not ashamed when their lies are exposed. They steal, not only out of sight, but right before one's eyes; so that it is not strange that quarrels and murders are frequent.

Polygamy is common; one chief, Shebasha, having as many as ten wives, and others two or three. Young women go on board vessels for no good purpose, and the fruit of such transgression is killed at birth; but the married are very kind to their children. They have slaves, brought from more southern tribes, and one hardly needs to describe the extreme wretchedness of those entirely at the mercy of such a race. A slave is killed at the death of a chief, and sometimes even at the feast that celebrates the completion of one of the better sort of houses. Like some other tribes, they are passionately fond of gambling, and in their social life is little law or order. The adage that "might makes right" has full force among them, and produces its bitter fruits. Even during so short a stay among them, Mr. Green narrowly escaped a violent death, once on shore, and again in a quarrel on shipboard, in which the chief officer was dangerously wounded and two natives killed.

Their religious ideas are very vague. They have no forms of worship, and are so ignorant of God that they believe their country was created by the yealth, or crow. They believe in Nimkelsus, the author of sickness, war, and famine. Those who are drowned, they think, continue in the sea, and only those who die in battle go to the house of the sun. They think that their priests, or shargars, can inflict sickness and foretell the future; and on certain occasions, when they rush among the people, biting and maiming, or even worse, they only flee and hide themselves, but do not think of resisting.[1]

OREGON.

In May, 1834, Rev. S. Parker, Rev. J. Dunbar, and S. Allis left Ithaca, New York, to explore the country west of the Rocky mountains, but did not reach St. Louis in time to join the annual caravan that season. Messrs. Dunbar and Allis spent the winter among the Pawnees of the upper Missouri. Dr. M. Whitman joined Mr. Parker in 1835, and, leaving St. Louis in April, they reached a branch of the Colorado in August, where they heard such favorable accounts of the openings for missionary operations beyond the Rocky mountains, that Dr. Whitman returned to make arrangements for entering the field, and Mr. Parker continued on alone to Fort Vancouver, whence he sailed to the Sandwich Islands, and returned round Cape Horn. He published an account of his journey in 1838,[2] which was so well received that the third edition was called for in 1842, and the whole work revised and enlarged to four hundred and eight pages. It contained a large and accurate map of the region, compiled from his own observations and the reports of previous explorers, and accounts of the geology of the route over which he passed, with an engraving of a remarkable basaltic formation on the Columbia river.

He contrasts the bold, striking scenery with the tame monotony of the valley of the Mississippi; five isolated cones, from ten thousand to fifteen thousand feet high, and covered with perpetual snow, being in sight from a hill near Fort Vancouver. He describes three main ranges, running north and south, west of the Rocky mountains: one above the falls of the Columbia, the second at and below the cascades, and the third along the shore of the Pacific; and between them, wide-spread valleys and plains, most of them covered with grass. The larger part of the country is destitute of forests, though they abound near the sea.[3] He dwells on the abundance of the streams and the clearness of the water, though falls and rapids hinder navigation, but speaks of the kind forethought that provided passes through the highest mountains, as though on purpose for railroads. Speaking of the Rocky mountains,[4] he says the

[1] *Missionary Herald*, 1830, pp. 343–345, 369–373. Do., 1831, pp. 33–39, 75–78, 105–107.
[2] *Journal of an Exploring Tour Beyond the Rocky Mountains.* Ithaca, N. Y. 12mo, pp. 371.
[3] Do., pp. 205–6.
[4] Do., pp. 76, 77.

passage through them is in a valley so gradual in its rise that he should not have known he was passing them, but for the cold, and the sight of the perpetual snow, thousands of feet above him. This valley is from three to fifteen miles wide; in length about eighty miles; and so level that even at that early day, he says: "There would be no difficulty in constructing a railroad from the Atlantic to the Pacific, and probably the time may not be far distant when trips will be made across the continent." He did not dream of the gold discovery that would fulfill his hopes so soon.

He gives careful statements about the aborigines — their numbers, dress, habits of life, character, and religious belief. He speaks of the Chiltz tribe, north of the Columbia; the Klicatats, north of the cascades; the Chenooks, on the banks of the Columbia, once powerful, but then numbering from fifteen hundred to two thousand; the seventeen tribes of the Calapooahs, on the Willamette river, numbering eight thousand seven hundred and eighty, occupying a country two hundred miles by sixty; south of them, the Umbaquas, divided into the Sconta, Chalula, Palakahu, Quattamya, and Chasta clans, in all about seven thousand; south of them, the Kinclà tribe up to 1829 boasted four thousand warriors, but then numbered probably not more than eight thousand in all; near the mouth of the Columbia were the Killamooks, their numbers not known; and south of them, the Saliootla and two other tribes, supposed to number two thousand persons. In addition to these, he estimated about twenty-five thousand more between latitude 42° and 47°, and nineteen thousand between 47° and 55°.

Besides these he describes the Indians of the interior, who occupy the upper plains between the falls of the Columbia and the Rocky mountains, whose leading tribes are the Nez Percés, Cayuses, Walla Wallas, Bonax, Shoshones, Spokeins, Flatheads, Cœur d'Aléne, Ponderas, Cootanies, Kettle Falls, Okanagans, and Carriers. These tribes, on account of their poverty, are called Snakes or Root-diggers.

He says that both polygamy and slavery exist among them, and that, when they kill their slaves, the loss of property is the only thing they think of. When two chiefs quarrel, instead of fighting, one kills a number of slaves, and challenges the other to kill as many; and so they go on, till one or the other confesses that he is unable to kill more, and acknowledges himself beaten. In 1829, the wife of Calpo, a Chenook chief, killed two female slaves to paddle the canoe of her dead daughter to the spirit land, and deposited the bodies of the three in a canoe, with garments and domestic implements.[1] These Indians never repeat the names of their friends after they are dead. Cazenove, another chief, lost a son. Mr. Parker conducted the funeral services, but the father, though he had his son buried according to the customs of the white man, went home and tried to kill his favorite wife, the mother of this son; for, like the Africans, they say no one in the family of a chief can die, unless through witchcraft, and he looked on her as the guilty one, though she had been most kind to the deceased through a long sickness, in which she did everything she could think of for his comfort. Providentially, she succeeded in fleeing to the fort, and implored protection, which, it is needless to add, was not refused, and she was sent away safely to her own people.[2]

We have another glimpse of heathenism from the journal of Mr. Dunbar among the Pawnees, in 1838. They had a fight with the Sioux, killed some, and took some women and children prisoners. The small-pox broke out among these, and only two or three survived. Many of the young children of the Pawnees died of the same disease, and the older people did not dare to hunt for fear of the Sioux. So, to recover their good fortune, they offered up one of the remaining captives as a sacrifice. This, their ancient custom, had been interrupted by white men; and, not long before, the last victim was shot by them, on the horse where she sat behind the agent, who had rescued her, as he thought, from her cruel fate.

One who had thrice witnessed the cruel deed thus describes it.[3] The victim is disrobed, half of her body painted red, the other half black; her right wrist and ankle are tied to one upright post, and the left wrist and ankle to another; and after various ceremonies, the boys shoot arrows made of a tall kind of reed, till her body is full of them. They do not pierce deep enough to kill, but cause intense pain. Then an old man steps forward and ends her misery by an iron-pointed arrow. Her chest is now cut open, and the heart is torn out and burned, while their weapons and implements are passed through the smoke, to insure success in hunting and

[1] Do., p. 245. [2] Do., pp. 251, 252. [3] *Missionary Herald*, 1838, p. 384.

tilling of the ground. The flesh is then cut off and thrown to the dogs, and the skeleton remains lashed to the poles till it falls to pieces. Such scenes, occurring alike among the Khonds of Hindostan, and so recently among the Indians of our own country, show the need of the missionary work which it is the object of this book to recommend.

DR. WHITMAN.

In his letter to the Prudential Committee of the Board, making provision for the preparation of this volume, Mr. Ely desired that some account be given of "instances where the direct influence of missionaries has controlled and hopefully shaped the destinies of communities and States." Perhaps no event in the history of missions will better illustrate this than the way in which Oregon and our whole Northern Pacific coast was saved to the United States. Our right to the territory drained by the Columbia river was based on the purchase of all French claims in 1803, and all Spanish claims in 1819, besides the title of discovery by Capt. Gray, in the ship "Columbia," of Boston, in 1791. Our possession of the region, however, was long thwarted by the agents of the Hudson's Bay Company, whose forts and factors controlled it. The fur-trading posts of J. J. Astor were broken up by it, and his far-famed Astoria was occupied by them, and called Fort George. In 1828, they took possession of the falls of the Willamette, with a view, as Sir George Simpson said, to the establishment of a British colony in the valley above. Other colonies were planted at various available points, so that they practically held the whole country in 1832. Dr. Marcus Whitman and Rev. Henry H. Spaulding, with their wives, crossed the mountains in 1836, and established two stations, one on the Walla Walla river, and the other on the Clear Water. These missionary ladies were the first white women who ever crossed the Rocky mountains. Though neither of them was strong, their courage and patience, in performing the journey, astonished both hunters and traders. As a physician and surgeon, Dr. Whitman often visited the forts of the Hudson's Bay Company, and saw how it was planning to secure that whole beautiful and valuable region for Great Britain, not only by immigration, but by creating the impression that wagons could never cross the Rocky mountains to the Columbia river. He felt that an American immigration must be brought over those mountains, or the whole region would be lost to the United States. In the autumn of 1842, he was sitting at the table in Fort Walla Walla, when a messenger came in, announcing the arrival of some British emigrants from Red river this side the mountains. Toasts were drank, and one of the company said, "Now the Americans may whistle; the country is ours." Sir George Simpson, their Governor-General, in his published report,[1] afterwards declared that "the colonists in the Willamette were British subjects;" that "they[2] had no rivals but the Russians;" and he "defied Congress to establish the Atlantic tariff in the Pacific ports." Dr. Whitman excused himself from the company, rode that night twenty-four miles to his home, sent his wife to the family of a Methodist missionary at the Dalles, donned his buffalo cloak, packed his pemmican[3] and flour on an extra pony, and started off to cross the continent, in mid-winter, risking cold, starvation,

[1] *Narrative of Voyage Round the World in 1841 and 1842.* [2] The English. [3] Dried buffalo meat.

and hostile Indians, to save Oregon for his country. He reached Missouri in February, 1843, frost-bitten and exhausted, yet preached as he went a crusade to rescue the Pacific coast from the Hudson's Bay Company. He contradicted the reports that no wagons could cross the mountains, and engaged to pilot a colony, in the spring, to the Columbia river.

In Washington, he called on Daniel Webster, then Secretary of State, and told his story. The secretary replied: "Wagons cannot cross the mountains. Sir G. Simpson, who is here, affirms that, and so do all his correspondents in that region. Besides, I am about trading that worthless territory for some valuable concessions in relation to the Newfoundland cod-fisheries." Dr. Whitman replied: "I hope you will not do it, sir; we want that valuable territory ourselves." He then went to President Tyler, and said the same things. The President replied: "Dr. Whitman, since you are a missionary, I will believe you; and if you take your emigrants over there, the treaty will not be ratified." In March, after a hurried visit to Boston, he was back in Missouri, and led a thousand emigrants to Fort Hall. Capt. Grant, who commanded it, in the service of the Hudson's Bay Company, asked where they were going, and, pronouncing the rest of the way impassable for wagons, offered to change them for pack-horses, as he had done for others. The men were in great trouble at the news. Dr. Whitman rose up and said: "Friends, you have trusted me so far; have I deceived you? Continue to trust me, and I will take you, wagons and all, to Oregon." They trusted him, and he went before, marking the road with stakes and bits of paper with written directions, till they reached his home, and at length the Willamette valley. Oregon was saved, and that by the patriotic energy and enterprise of a missionary.[1]

Dr. Whitman and his eight hundred emigrants emerged on the plains of the Columbia, September 4, 1843. On November 29, 1847, he and his estimable wife were massacred by the Cayuse Indians. It may not always be safe to rest on circumstantial evidence; but the intelligent freemen of these United States, when they ask how such an end could come to such a life, cannot forget that between 1843 and 1847 a succession of intrigues was planned against Protestant and American influence; that the introduction of measles and other diseases by the emigrants of 1847 was represented to the Indians by the priests as "the judgment of God on the Americans for their heresy." They will remember the great kindness of the Indians to Dr. Whitman, up to this date; that in the massacre, all connected with the Hudson's Bay Company, and the Papists, were spared, as a priest said they would be; and that the very next morning this papal priest baptized the children of the murderers; and that an Indian, whom Rev. Mr. Spaulding met riding with that priest, within three miles of the station, had started with him on purpose to kill that missionary also, but, having accidentally discharged his pistol just before meeting him, he could not do it then; and before he had another opportunity to attempt the bloody deed, Mr. Spaulding had got out of reach by walking ninety miles, without food, traveling at night and hiding in the day-time. And yet it was not the Hudson's Bay Company that prompted the deed. Mr. Spaulding

[1] Rev. G. H. Atkinson, D. D., in *Missionary Herald*, 1869, pp. 76–80.

writes: "Too much praise cannot be awarded to the Hudson's Bay Company, especially to Mr. Ogden, for their timely, prompt, judicious, and Christian efforts in our behalf. We owe it, under God, to Messrs. Ogden and Douglass, that we are alive to-day."[1]

HAWAIIAN ISLANDS.

Our missionaries have done much for geography among the isles of the Pacific. The Hawaiian Islands have awakened great interest during the last fifty years. More than sixty volumes have been written about them in English, relating chiefly to missionary work.

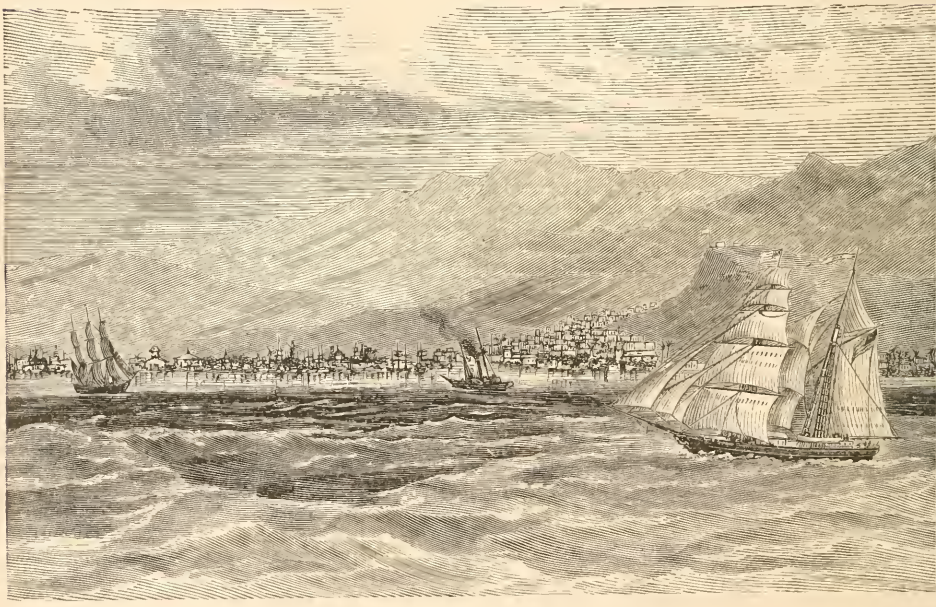
Little was known of them previous to 1820, when the missionaries went there; now little relating to them is unknown. Their geography is as well known as that of any State in New England. They number twelve, lying in the North Pacific, extending three hundred and sixty miles from northwest to southeast, between latitude 18° 55′ and 22° 20′ north, and longitude 154° 55′ and 160° 15′ west. Their names and areas are: Hawaii, four thousand and forty square miles; Maui, six hundred and three square miles; Kahoolawe, sixty square miles; Lanai, one hundred and fifty square miles; Molokai, one hundred and sixty-nine square miles; Oahu, five hundred and twenty-two square miles; Kauai, five hundred and twenty-seven square miles; and Niihau, seventy square miles; with four small islets, named Molokini, Lehua, Kaula, and Bird Island; in all, sixty-one thousand square miles. Only seven of them are inhabited. They are two thousand one hundred miles from San Francisco; three thousand four hundred miles from Japan, and nearly the same from China, Australia, and Panama. They are all of volcanic origin, and mountainous; the arable land lying mostly in the valleys and in an alluvial belt along the shore. The uplands are fitted for grazing, and the mountains, covered with dense forests, are unfit for cultivation. The trade winds strike their northeastern coasts, causing frequent rains, a fertile soil, and perennial streams. On that side the mountain forests are most dense; and, while mosses have been found on the east of Mauna Kea at an elevation of more than twelve thousand feet, on the west side of Mauna Loa they disappear at the height of eight thousand feet. In one year[2] 182 inches rain fell at Hilo; 38.156 inches in March, 1847; 10.466 inches in a single day. On the west coast rain seldom falls.[3]

Surface. The three principal mountains of Hawaii are: Mauna Kea, thirteen thousand nine hundred and fifty-three feet; Mauna Loa, an active volcano, thirteen thousand seven hundred and sixty feet; and Mauna Hualalai, seven thousand eight hundred and twenty-two feet. Kilauea, three thousand nine hundred and seventy feet high, on the eastern slope of Mauna Loa, is the largest active crater in the world. It is a pit eight miles in circumference, and one thousand feet in depth. Its activity is independent of the summit crater. Mauna Haleakala, on the eastern peninsula, is ten thousand two hundred feet

[1] See *Missionary Herald*, 1848, pp. 237–241; where is also a map of the vicinity. [2] 1846–7.
[3] Anderson's *Hawaiian Islands*, pp. 25–28. T. M. Coan, M. D., in *American Cyclopædia*.

high, and on its summit is the largest crater known, two thousand feet deep and twenty-seven miles in circumference. The highest peak on Oahu is three thousand three hundred and ten feet high. Molokai presents a magnificent wall of precipices to the north. Nowhere in the islands can one journey far without seeing extinct craters, generally covered with vegetation. Many hundred square miles of Hawaii are covered with recent and barren lavas. Volcanic eruptions enlarge the area of Hawaii. That of 1843 poured out seventeen billions, and that of 1855 thirty-eight billions, of cubic feet of lava. One part of south Kona has broad fields of jagged lava and a wild sea of slag and cinders. It is a terrible wilderness of vitreous matter, with a choppy surface, like the ocean suddenly petrified in a storm; another part is beautiful and fertile, with groves of fruit trees and a perfect jungle of shrubbery and vines. Much of the scenery of the islands is exceedingly beautiful.

An excellent map of the group, and six views of island scenery, may be found in Rev. H. Bingham's *Twenty-one Years' Residence at the Sandwich Islands.*



THE "MORNING STAR" APPROACHING HONOLULU.

Harbors. That of Honolulu, on the south side of Oahu, is the best. It is protected by a coral reef, with twenty-one feet of water on the bar at low tide, and from four to six and a half fathoms inside. The anchorage is safe, and it is easy of access with all winds. A view of it is here given, with the missionary packet, "The Morning Star," approaching the shore. Hilo, on the northeast shore of Hawaii, has a good natural harbor, protected by a reef, and with from three to eight fathoms of water; but it lacks good wharves. Lahaina, on Maui, has an open roadstead, with good anchorage. Kawaihai and

Kealakeakua, on the west of Hawaii, and Waimea, Koloa, Nawiliwili, and Hanalei, on Kauai, have tolerable harbors.

Flora. The indigenous Flora numbers about three hundred and seventy-three species, and many more have been introduced. The cocoanut, banana, bread-fruit, pandanus, cordyline,[1] and taro or kalo[2] belong to the first. The productions of the islands are, sugar, rice, coffee, cotton, sandal-wood, tobacco, arrowroot, wheat, maize, tapioca, oranges, lemons, bananas, tamarinds, bread-fruit, guavas, potatoes, yams, kalo, fungus, pulu,[3] and ornamental woods.

Fauna. The indigenous Fauna is small. Swine, dogs, and rats tell the whole story in the line of quadrupeds; and domestic fowls, a bat that flies by day, snipes, plovers, and wild ducks are the principal birds. There are only a few species of songsters, but many birds noted for brilliant plumage; one of these, *Melithreptes Pacifica*, has a golden-yellow tuft of feathers under each wing, about an inch long. The war-cloak of Kamehameha I, four feet long, and eleven and a half round the bottom, was made of these, and it took the reigns of nine kings to complete it. Many varieties of fish frequent the shores, and form a staple article of food. Now cattle, sheep, goats, and hogs are raised. Herds of wild cattle, descended from those introduced by Vancouver, in 1793, roam in the mountain forests, and are hunted for their horns and hides.

Commerce. The islands lie several hundred miles south of the route between California and China, and form a station between San Francisco and Australia, whither the trade of the islands now tends. Much of the sugar crop of 1873 went there. Three times have the islands sought to make a commercial treaty with the United States — in 1856, 1867, and 1869 — but in vain. The government even offered a harbor as an inducement, but that also failed to secure it. Commerce, till now, has been mainly with California. Its value from 1853 to 1873, including freights, passage money, and cargo values, in and out, exceeded $19,750,000. The American duties on Hawaiian sugar were $225,000; on rice, etc., $75,000; in all, $300,000 annually. The imports from the United States in 1873 exceeded $1,000,000. The sugar sent to California rose from 282,000 pounds in 1853 to 15,500,000 in 1872. The total export in 1873 was 23,129,101 pounds. The total value of exports in 1873 was $2,128,055, and of imports $1,349,448. The number of vessels arriving was one hundred and six, with a tonnage of sixty-two thousand and eighty-nine. The number of cargoes valued at over $10,000 was thirty-four; twenty-eight of them in American vessels, three in British, and three in Hawaiian. Whalers touching at Honolulu fell off from five hundred and forty-nine in 1859 to sixty-three in 1873. In 1872, eighty-six American vessels, twenty-two Hawaiian, fifteen British, six German, three Italian, three Norwegian, two Tahitian, and one Swedish vessel arrived at Honolulu, making the custom house receipts $218,375.

Government. Up to 1839, this was an absolute monarchy. Then Kamehameha signed a bill of rights, and in 1840 and 1842 granted constitutions, with

[1] Ki. [2] *Arum exulentum.* [3] The fiber of the tree fern.

universal suffrage, and a biennial parliament. Civil and penal codes of laws were enacted, and one third of the land was secured to the people, which formerly all belonged to the king and chiefs. August 13, 1864, Kamehameha V altered the constitution so as to impose qualifications on suffrage and centralize the government. Voters must read and write, pay their taxes, and have an annual income of seventy-five dollars. The executive department consists of the king, a privy council, and four responsible ministers. The legislature consists of the king, and a parliament of fourteen nobles and twenty-eight representatives, which discusses and votes in one body. The judiciary consists of a supreme court, composed of a chief justice, who is also chancellor, and at least two judges; four district courts, police, and other tribunals. In 1870 the income of the government was $456,000. The salaries amounted to half of this. That of the king was $22,500. Liberty of worship and of the press, free education, the right of petition, trial by jury, and the right of habeas corpus are guaranteed. There is no army or navy, though the king has a body guard.

The condition of the people could not have been much worse than it was when the missionaries arrived. The chiefs were regarded with superstitious awe; even their persons were much larger than those of their subjects. They owned not only the land, but the people, also; the fish of the sea, and the bodies and implements of the fishermen. Everything that grew on land or in the sea was theirs. They were reverentially obeyed while living, and deified after death.

Laborers did not receive more than one third of their earnings, paid in kind, and even that was separated by no line of demarcation from the property of their employers. If a tenant improved his ground better than his neighbors, it only marked him out for plunder. At the death of the king, every man was liable to be deprived of all he had. There was no law or courts to which any could appeal. Taxes knew no limit in amount or frequency of exaction, and the king demanded as much labor, and as often, as he wished; hence no man dared to have a good house, a large hog, or a good dress.

The system of tabu favored oppression. If the shadow of a subject fell on a chief, the penalty was death; so, also, if he stood, instead of bowing down, when anything belonging to the king was carried by; and many similar "incidents" were made excuses for murder. The priests also promoted this state of things.

If human victims were needed for the altars, the king's enemies, or even those whom he disliked without cause, were selected for slaughter. When the king visited a place, he often required heavy stones and timber from the mountains, to build a temple; and after their toil, some of the builders were sacrificed to consecrate the altars. If the priests demanded food, or land, or human sacrifices for the gods, they were given at once. Moreover, the husband must eat in one house, and his wife in another. The oven could not be used for both at once; and if a woman ate pork, cocoanuts, bananas, or certain kinds of fish, she must die.

The Hawaiians had four principal gods, Ku, Lono, Kane, and Kanaloa, and they were supposed to enter into their images only through certain ceremonies.

They had an indistinct notion of a future state of rewards in Wakea, and a place of misery called Milu. One of their idols was made of a poisonous wood, and was often used as the most convenient method of destroying those whom chiefs or priests wanted out of the way.

The vegetable food of the people was mostly kalo and sweet potatoes, with bananas, and a few cocoanuts and bread-fruit. For animal food they had dogs and hogs, and especially fish. Arrowroot grew there, but the people knew not how to prepare it. Sugar cane is of modern introduction. They made an intoxicating drink from a narcotic root called awa.

Having no iron, they used tools of stone, bone, and wood to build their huts and canoes and make their weapons and fishing gear.

Their social state was about as bad as often exists, even among the heathen. The five or six inmates of a hut could hardly be called a family, for the men often had several wives, whom they changed for slight cause, and with little form of law. Women also frequently had several husbands, whom they changed with equal facility. In their huts, with the merest apology for clothing, in the form of a fringed girdle, they ate poi — a preparation of the kalo, or taro — with their fingers, from one calabash, and with or without a kapu[1] they lay down on the same mat.

Some lived in caves, with the earth for a floor, and a small excavation in it, their fire-place and oven. Though they had a mild climate, and a fruitful soil in their valleys, with no winter to provide for, they were in a state of poverty, compared with which our poor are rich.

But the worst of all was their moral condition. Society was one mire of pollution. Marriage was practically unknown; husbands interchanged wives, and wives husbands, as an ordinary civility. Refusal of illicit intercourse was counted meanness. It is not strange, then, that parents often gave away their children as soon as born, or buried them alive, or killed them by other methods, to get rid of the trouble of caring for them. Two thirds of the children thus perished. Mothers, instead of soothing their suffering infants, dug holes and trampled down the earth above their faint struggles and smothered cries. Often five, or even seven, in succession, were thus disposed of, that she might be more free for vicious indulgence. Their sports were at once cruel and licentious. In their boxing matches, sometimes quite a number were left dead on the field. They were exceedingly given to gambling. Their dances were utterly abominable and indescribable, and were protracted through the night. Their punishments were cruel and barbarous, and the bodies of those slain on the altar were left there to rot in the sun. Their modes of burial were revolting. The corpses of chiefs were allowed to decay till the bones readily separated from the flesh, when they were gathered together and preserved; and the dead bodies of the people were buried secretly in the night, lest their bones should be made into arrows or fish-hooks.

At the death of a chief, the people plunged unrestrained into all wickedness. They threw off what little clothing they wore, and stole, plundered, and glutted personal revenge with impunity; promiscuous lewdness prevailed;

[1] Coverlid.

men knocked out each other's front teeth, as badges of mourning, and no one was safe from any kind of wrong or violence.

The people were trained to be expert thieves. Robbery also was common; and murder for the sake of robbery. In the island of Oahu lived a clan of notorious cannibals. The deformed, instead of receiving pity, were ridiculed and abused. If the chief took a man's land, his neighbors seized his personal property; if his house burned down, his furniture was stolen. Aged parents were often thrown from precipices, or buried alive; and the sick were often left to die a lingering death from neglect, while those who should have cared for them indulged in revelry out of the sight of their suffering and out of the reach of their cries. The treatment of their so-called doctors neither relieved suffering nor promoted recovery; and the insane were often stoned to death. The children of prisoners taken in war were commonly put to death before the eyes of their parents, who were then, after various tortures, pounded to death with stones.[1]

When they bathed in the sea, no clothing at all was worn. Women left their pau[2] at home, and passed through the village going and returning. Even women of rank have thus called on missionaries, and sent their servant to bring the pau, and put it on in the missionary's presence. In one of the early years of the mission, a chief of Hawaii was reproved for his nakedness; next time, he walked into the house with the addition of a pair of silk stockings and a hat.[3]

They had no written language, and counted up to forty, as we do to one hundred, and then went back and counted ten forties as we do ten hundreds.

MICRONESIA AND MARQUESAS ISLANDS.

Besides the Sandwich Islands, the American Board has also occupied Micronesia, comprising the Marshall or Mulgrave Islands and the Kingsmill or Gilbert Islands, lying in the direction of New Guinea, two thousand miles southwest of Honolulu.

Ponape, or Ascension Island, the largest of the Caroline Islands, is basaltic, sixty miles in circumference, and rises in terraces from the mangrove-covered shore, to the height of two thousand eight hundred and fifty feet. It has rivers and waterfalls, and is a paradise, with a delightful climate, the thermometer varying for three years only seventeen degrees. Among its productions are the bread-fruit, banana, cocoanut, taro, sugar cane, ava, arrowroot, sassafras, sago, wild orange, and mango, with many timber trees; while lemons, oranges, pineapples, coffee, tamarinds, and other fruits thrive as exotics. Twenty varieties of birds fill the air with life, and a population of five thousand are hidden away in its forests. They belong to the Malay stock.

Kusaie, or Strong's Island, is of similar formation, and produces the same growths. It is thirty miles in circumference, and rises, covered with woods, to the height of two thousand feet. The people belong to the same race; and, for a wonder, polygamy is here unknown, and labor counted honorable.

Northeast of this lie the Marshall Islands, divided into the Radack[4] and

[1] *Dibble*, pp. 86–137. [2] Girdle. [3] Anderson's *Hawaiian Islands*, pp. 93 and 297.
[4] Eastern.

Ralick[1] groups, comprising in all about thirty good-sized coral islands, higher and more fertile than the Gilbert group to the south. The population is about twelve thousand, and were so noted for ferocity, that foreigners rarely ventured among them. Their forms are spare and athletic. The women wear their hair smoothly parted, and sometimes adorned with flowers. Their broidered skirts reach from the waist to the feet. The men also are very skillful and ingenious.

The Gilbert Islands form sixteen groups of a fair size, with many islets, and a population of thirty thousand. The cocoanut tree furnishes the natives almost everything they eat, drink, wear, or live in. Hats, clothes, mats, and cords are made from its leaves; houses from its wood; they eat the fruit, drink the milk, make molasses and arrack from its juice, besides immense quantities of oil. The people practice polygamy. Children go naked till ten years old; when boys put on a girdle, and girls a broader covering. This nudity is somewhat relieved by profuse tattooing. The language resembles Hawaiian. All these islands were the homes of sloth and sensuality, of theft and violence. A race of tawny savages lived almost naked, swam like fish in the sea, and basked in the sun on shore, depending for food on their trees and plants, and also on their fish-hooks.

The Marquesas Islands are six in number, about two thousand miles east of south from the Sandwich Islands, and nearly as far from Micronesia. They are volcanic, and rise to the height of four thousand feet, with grand and varied scenery. The climate is good; and all manner of tropical fruits abound. The population, of about eight thousand, is Malayan, and the language like the Hawaiian. The people were athletic, but lazy, lawless, and ferocious. Personal vengeance and tribal wars never ceased. The bodies of those slain in battle were distributed in morsels among the clan, and even children loved the horrid food. The men were hideously tattooed in the forms of lizards, snakes, and other animals, and the women smeared with oil and turmeric. Besides their cannibalism, their tabus compelled father, mother, and grown-up daughter, each to eat apart: and this was the missionary field to which Providence called the churches of the Sandwich Islands.

Dr. L. H. Gulick furnishes a map and a detailed description of these islands, and the dates of their discovery, in the *Missionary Herald*.[2] The "Morning Star" has since discovered one new island, and was the first vessel to enter the lagoon of another.

Dr. George Pierson, in view of the frequent intercourse between the islands — two hundred boats sometimes coming to Ebon in a day — and the fact that one man from that island was once driven by a storm more than sixteen hundred miles, has no difficulty in accounting for the original settlement of the islands of the Pacific, or even of the American continent.

All that the world knows of Micronesia, the productions of its soil, the fishes of its seas, its languages, customs, and superstitions, it owes to our missionaries. True, ships had previously touched at the islands; but, apart from specimens gathered by missionaries, vocabularies formed by them, and personal aid as interpreters, even government exploring expeditions have ac-

[1] Western.

[2] 1857, pp. 41–48.

complished little. Scholars at home are largely dependent on the materials thus gathered to their hands.

Eight educated natives of the Hawaiian islands coöperate with our missionaries in lifting the people of Micronesia up to the plane of civilization and intellectual life. Balbi and Ritter, Drs. John Pickering and A. P. Peabody, Prof. J. D. Dana, and Commodore Wilkes have all acknowledged in appreciative words the debt the world owes to them. Had it been foretold forty years ago that a cultured, Christian native of the Samoan Islands would negotiate a treaty at Washington in 1877, and that our own Secretary of State would ascribe all that distinguishes him and his people from their former condition to missionaries, it would have seemed an idle dream. So, a prediction forty years ago of what has been done by our missionaries in the Pacific, for science, would have provoked a sneer. Even a single person, Joseph, a native of the Gilbert Islands, once a naked savage, but now speaking both English and Hawaiian, besides his native tongue, and rendering valuable service to the mission, both as a linguist and proof-reader, is in himself a living example of the elevating power of Christian missions.

II.

GEOGRAPHY CONTINUED.

JAPAN.

THE empire of Japan consists of three large islands, the largest containing one hundred thousand, another sixteen thousand, and the smallest ten thousand square miles, with many smaller islands; making, in all, probably about one hundred and sixty thousand square miles. The population is not far from thirty millions. Rev. Dr. Blodget calls it a land of hills and valleys and lofty mountains; a land of pure air, running streams, and fountains; abounding in trees and flowers, and producing a good supply of food for man and beast. The soil almost everywhere is well cultivated. Ten million six hundred and ninety-five thousand seven hundred and sixty acres were cultivated in 1878; equal to one half the improved lands of the State of Illinois. A British minister at Yedo said that "outside of England, there is nothing so green, so garden-like, so full of tranquil beauty." Of minerals, gold, silver, copper, tin, lead, mercury, coal, sulphur, and salt are found there. Japanese civilization has a Chinese root. Chinese is their learned language. Chinese classics have been their school-books, and many Chinese words are in common use. The ancient faith of the land was Shintooism; but this, too bare and cold a system to be popular, has been supplanted by Buddhism among the people. The educated classes have long been Confucianists. The government has recently tried to revive Shintooism, but not very successfully. There is a historical sketch of Japan in the *Missionary Herald* for 1864, pp. 35–38, and of Protestant missions in that country, pp. 65–70. See, also, *Japan as a Mission Field*, by Rev. I. R. Worcester, D. D.

The people are of middling size; with a swarthy complexion, and black hair. They are active, exceedingly polite, and quicker of apprehension than other Asiatics. The poorest are taught to read and write, and their literature is somewhat extensive. Many mechanical arts are carried to a high degree of perfection, and commerce flourishes.

This people were first made known to Europe by Marco Polo, in 1295. In 1543, Pinto, a Portuguese adventurer, was driven to Japan by a storm, and a Portuguese settlement was the result. Francis Xavier and others went there in 1549, were well received, and baptized many. In 1582, Japanese Christians sent an embassy to the Pope, and in 1591–92 twelve thousand were baptized; but some were put to death before the close of the century. The Dutch

reached Japan in 1600; and, when the government became hostile to the Portuguese, sought to turn that to their own advantage. The Papists, having destroyed some idols and their temples, were persecuted, and in 1622 many were massacred. In 1629, they numbered one hundred thousand; but, about the year 1637, having conspired with the Portuguese against the government, they were extirpated. The castle of Simabara, where thirty-seven thousand had taken refuge, was destroyed with the help of Dutch cannon, and all were slain. In 1641, the Dutch were shut up in the small island of Desina, near Nagasaki, and till 1873 the edict against Christianity remained in force.

In 1846, Commodore Biddle, of the United States navy, failed in his endeavor to open friendly negotiations with Japan. In 1849, the United States ship "Preble," Capt. Glynn, was allowed to carry away some shipwrecked sailors, but nothing more. March 31, 1854, Commodore Perry, at the head of nine ships of war, succeeded in making a treaty, having visited the bay of Yedo the year before. Two ports were opened to American ships for supplies. In June, 1857, Mr. Harris, the United States consul-general, began negotiations, and July 29, 1858, a treaty was signed, allowing Americans to reside at Simoda and Hakodadi, opening Kanagawa, Nagasaki, and Hakodadi to general trade, and securing religious toleration for Americans, with the right to build churches. In 1860 Hiogo, or Kobe, for the place is known by both names, was also opened, and an American ambassador received in Yedo. The city of Kobe contains sixty-five thousand inhabitants.

Between July and October 9, 1858, treaties were made between Japan and the Netherlands, Russia, Great Britain, and France, on the basis of Mr. Harris' negotiations.

In May, 1859, two Episcopal missionaries arrived at Nagasaki, but were so hampered in their labors that, in 1868, Bishop Boone reported that he had no missionary in Japan. Other churches followed; among them the English Church Missionary Society and the missionary boards of the Presbyterian and (Dutch) Reformed churches in the United States; in November, 1869, the American Board began a mission, selecting Kobe for a station.

Till recently, the Mikado, or Emperor, while nominally reigning, was really set aside, while the Siogoon, or Tycoon, administered the government, and a Daimio ruled each of the sixty-eight provinces of the empire. In 1868 a revolution changed all this. The office of Tycoon was abolished — the word itself has become obsolete — and the Mikado, whose dynasty dates back to 600 B. C., again exercised his prerogatives. Beginning to reign in 1867, at seventeen years of age, at eighteen he wielded all the power which his predecessors had lost since 1142, at which time a general, successful in putting down a rebellion, assumed the exercise of temporal power, leaving the emperor only a nominal supremacy. Now the one hundred and twenty-second of a long line of kings resumed his ancient rights; and the Samurai, military retainers of the Daimios, fell back among the people.

Their police system is almost perfect, including the danjodai, a secret imperial police, independent of the local constabulary, and often acting without its knowledge. Dr. Wallace Taylor was allowed to go, in 1875, to Okayama,

in Bizen, a province one hundred miles west of Kobe, on the inland sea, in a beautiful and populous valley. Rev. J. L. Atkinson went in 1876 two hundred and fifty miles from Kioto to the island of Shikoku. Rev. J. D. Davis and Dr. Gulick made a tour in the basin of Lake Biwa. Dr. J. C. Berry has also had large liberty of travel, on account of his medical skill. Preaching tours have also yielded geographical information. Rev. Jos. H. Neesima, a native, not being subject to the same restrictions as foreigners, learns much concerning all parts of the empire. Dr. A. O. Treat's letter in the *Missionary Herald* for April, 1875, is full of condensed information concerning the four large islands of Niphon, Yesso, Shikoku, and Kiusiu, and the smaller ones, all divided into eighty-four provinces and seven hundred and seventeen counties. It speaks of the Inland Sea, four hundred miles in length, and of the general surface of the country; describes many of the hills as terraced to the top. As rice is the great staple, rice lands are worth five times as much as others. It treats also of the government before and since the revolution, of the people and their industries.

Thousands of English text-books are now for sale in the bookstores of Japan, and many of them have been translated into Japanese, including works on geography, arithmetic, philosophy, and the higher mathematics. January 1, 1873, beheld Japan wheeling into line with Christendom in the adoption of the Christian calendar. At the present date, there are one hundred and six Protestant missionaries there, with forty-four churches, nine ordained native preachers, and more than two thousand five hundred members.[1] Sixteen[2] of these churches are in connection with the Board, with five hundred and fourteen members. Eight of them have native pastors, and another ordained native preacher, Mr. Neesima, was educated in the United States.

Newspapers in Japan date only from 1870; now there are more than a hundred, and the highest literary talent is employed on them. Subjects of public and international interest are discussed in them with a force and intelligence that will bear comparison with the best journalism of the times.

The ancient literature of Japan consisted chiefly of history and philosophy, with poetry and fiction; the last was read by all classes, and especially by the women; but now the strong desire to become acquainted with foreign countries compels the creation of a literature that goes to satisfy this craving.

A theological school for training preachers had, in 1879, more than one hundred and twenty-seven pupils. A girls' school at Kobe had as many as fifty-four different pupils in 1878; the Kioto Home, or girls' seminary, twenty-five, and another at Osaka had thirty.[3]

These general statements, gleaned from missionary communications, will now be followed by a *résumé* of two papers by S. Wells Williams, LL.D., published in the *Missionary Herald*. The first, on Lewchew, appeared in 1854, pp. 178–184, and the other on Hakodadi, in 1855, pp. 86–88.

[1] Dr. Clark at Syracuse.

[2] *Report*, 1879–80. Contributions were reported equivalent to an average of $20 in this country for each member. *Missionary Herald*, 1880, pp. 433–434.

[3] In 1879 the schools for girls, at Kobe, Kioto, and Osaka, had over one hundred and twenty pupils; and the course of study includes many branches taught in our high schools.

LEWCHEW.

Dr. Williams went as interpreter to Commodore Perry, in his expedition to Japan, in 1853. The squadron touched at Napa, a port in the Lewchew Islands. The natives call them Doo Choo, and the Japanese Riu Kiu; and the following statements show how faithfully he improved his opportunities, both then and in 1837, in the ship "Morrison."

The island of Lewchew is about sixty miles long, and from twelve to fifteen in width, and is the principal one of a group nearly equidistant from China and Japan. Including the Madjicosimah group to the southwest, the largest of which are Typing San, and Pa-chung San, the whole number of islands is thirty-six. On the map some of them have English names given them by their foreign discoverers — as Montgomery, Sandy, Crown, and Breaker Islands; and others have native names, as Tu Sima, Tunachi, Kukien, and Kumi San.

The outline of Lewchew presents no prominent elevation to one approaching from the sea, though it rises by gentle acclivities to the height of one thousand feet; but, viewed close by, the landscape is varied and agreeable. In the southern part the prevailing rock is limestone, overlying friable granite, which appears alone in the northern division. Coral reefs line the shores, in some places raised up, so as to form ledges along the beach.

The climate is one of the most healthy and delightful in this part of the world; seldom cold enough for fires, and with summer cooled by easterly and southwesterly winds. Vegetation is more tropical than in China, yet its grasses belong more to the temperate zone. Its productions are less varied than either those of China or Japan. Among them are egg plants, cucumbers, squashes, melons, sweet potatoes, rice, tobacco, wheat, maize, two kinds of millet, and sugar cane. Fruits are not abundant, though the banana, peach, orange, lime, and guava are known.

Timber and fuel are brought from the northern forests, where the camphor and tallow trees are found. The bastard banyan is common. Its flexible branches are often trained along the tops of walls, contrasting finely with the stones. Near the towns, copses of pine — some trees towering above the rest, with a large flat top — adorn the declivities of the hills.

Most of the people are engaged in the cultivation of the soil, and the fields give evidence of great labor, in which woman takes a large share. The rice is transplanted, as in China, and taro plants are scattered among it. Rice-fields and patches of vegetables, contrasted with growing wheat, diversify the landscape, rendered still more beautiful by the groves on the hill-tops, and plats of green sward.

The people are not tall, but compactly built, and well proportioned. A boat's crew of a dozen averaged five feet and an inch in height; and the gentry, who are taller than the rest, would not exceed five feet four inches. The women measure less than five feet. In general, the people are healthy, though their faces bear the impress of unceasing toil. This sad aspect strikes a visitor as soon as he lands. The wrinkled, grimy, and care-worn features of the women seen on the streets indicate their low position in society. They do most of the marketing, and five or six hundred may be seen at once, each attending to her basket or stall, in the market of Napa. Ladies seldom go afoot, and when abroad wear a cloak over their dress, fastened only at the neck. The color of the people is a reddish olive tint, darker in general than the Chinese, but not with such oblique eyes or high cheek bones; indicating a different and southern origin. Among the aged were some who would not be distinguished from Malays. The population of the island is said to be more than one hundred thousand; nearly one half of it in Napa and Shui.

Napa, or Nafa, is the seaport, stretching a mile into the interior, with most of the houses in sight from the harbor. Shui, or Shudi, is the capital, pleasantly situated on a hill about three miles from Napa, and connected by a broad, paved road, in places raised above the marsh with great labor. It is well built, and a stream, collected here and there into tanks as it descends the hill, and crossed now and then by massive stone bridges, adds greatly to its beauty. The palace is a collection of large buildings, enclosed by a solid stone wall, so situated as to serve for a fortress in case of need. The structures themselves are poor; but the stone steps, ornamented triple gate-ways, and paved courts, with detached trees and arbors, display some skill. The three largest buildings face one court, but are now sadly neglected. The

roofs are of tiles laid in ridges, and adorned with finials. The houses of Shui are scattered among trees and rocky ledges in a very picturesque way. The streets of both cities are partly macadamized, with open gutters at the sides; some of them wide enough for carriages, though none of these are used. The common roads seem as rough as if they had never known repairs. The markets are held in the squares and street corners, and furnish only the commonest necessaries of life.

Though the villages are often prettily situated, all bear witness to the poverty and oppression of the people. Widumai is so hidden in a grove as to be nearly invisible. The streets are lined with bamboo hedges that meet and form an arch overhead. The houses are also enclosed with them, so that each seems sheltered in a bamboo grove. In some villages these hedges are clipped down to the same size as the stone walls, with which they alternate very pleasantly. Most of the houses are thatched huts, and their whole aspect betokens poverty and untidiness. Some are not so good as sheep-cotes in Europe, and many not over ten feet square, having their sides thatched with straw, often without fire-place or window, or even anything to close the doorway.

The arrangement of their houses is very simple, and fitted only for a warm climate. Each man studies to prevent others from looking into his premises, either by a dead wall in front of the gate, or by placing the gate at right angles with the street. The roof rests on a double row of posts, about four feet apart, the space between the rows forming a sheltered porch. The beams connecting the posts have grooves, in which panels slide, like the doors of some of our barns, and form the sides of the house; and others in like manner, crossing the house, divide it into rooms. The floor is two feet above the ground, and usually covered with thick mats, on which felt carpets are sometimes spread. In cold, rainy weather — frost is unknown — sashes covered with oiled paper imperfectly supply the place of glass, and braziers of charcoal furnish warmth. The whole structure, porch and all, can be thrown into one room. No chairs or tables are seen. They sit and sleep on the mats; low stands are used for writing desks, and a raised divan, in a few houses, furnishes a place for articles of value. Mats and carpets are alive with fleas, and mosquitoes are not wanting. The panels in the better houses are frequently ornamented with scrolls and pictures. The walls about their houses are often built of unhewn stone, fitted together in Cyclopean style, and the surface picked smooth with a hammer. Some of these are two centuries old. There are no walls of squared stone. To us a Lewchew house seems naked and cheerless, but its inmates, who know nothing better, are content.

Their dress is a loose robe, lapping over in front, and secured by a girdle. Its capacious bosom is usually well filled with books or other things. Their grass sandals are held by a strap passing round the great toe. On occasions of ceremony a sock is worn, with a thumb-like appendage to accommodate the strap. Rich people vary the number of their robes with the weather. The poor have only one, and thousands of laborers only a waistcloth. The women are always modestly dressed. The men secure their hair with two large metal pins. It is done up in a coil on top of the head, surmounted by a bow, through which a large pin is passed. Much time is spent in arranging and oiling it. One pin with an ornamental head shaped like a flower is always in front. Women wear their hair in a knot on the side of the head. The ends soon become disheveled and do not look neat. Married women tattoo the back of their hands blue to the fingers' ends — a custom said to have originated with a faithful wife, who, when tried, thus destroyed her beauty to preserve her honor. Neither sex cover the head, but official rank is denoted by an oblong flat-topped silk cap, of different color, according to the rank of the wearer. In cold weather an overcoat of thick cotton is worn by the gentry.

Animal food in Lewchew is chiefly fish, pork, and poultry. Goat's flesh is used, but beef rarely. Sheep are said to be unknown. Cattle are small, and are used for ploughing. Horses are small, but terribly underfed and overworked. The bare ribs of their saddles are not inviting to strangers. No buffaloes are seen, and scarcely a dog or cat. Small, uncomfortable sedans are used for carriages.

Their boats are either open scows, paddled by men seated on the gunwale, or canoes that can scarcely hold two men, and without outriggers. Their junks copy Chinese models, though much better ones from Japan are always in their harbors.

Their workshops are open to the street, so that all done inside can be seen. Their tools and manipulations resemble those of China. Some carpenters and blacksmiths were noticed, and two or three silversmiths making hair-pins. Women use rude looms and bamboo spinning wheels. Cotton is bleached, and woven in checked patterns with dyed thread. Sometimes, however, the cloth is stamped with a small block of wood and a hammer. No statistics of commerce were attainable.

Their language is a dialect of the Japanese, yet so different that the two nations cannot converse together. Chinese literature is much prized. The writings of Confucius and Mencius are studied, the people learning the Chinese characters through the Japanese, with their own pronunciation — a most circuitous road to knowledge. Scholars speak Chinese with the Peking pronunciation. The masses are untaught, and no books are seen for sale, or placards, or advertisements on the walls, as in China. The people clip their words so that it is difficult to get the true pronunciation.

Temples are numerous, in which ancestral worship is performed and both Buddha and Confucius adored. They are among the best buildings, affording lodgings for travelers and dwellings for priests. Most of them are protected by gigantic stone idols on each side of the entrance. Though the priests have little political influence, they receive a good support. The people worship stones to propitiate the gods of grain, and the bastard banyan to obtain long life. These trees, carefully guarded by stone walls, suggest to the Bible student the groves of the Canaanites.

The tombs seem more costly than the houses. Some of them are excavated in rocks and hills, and some built of stones. They are shaped like a horse-shoe, and are kept very neat, but contain no inscriptions. A stone is removed from the back of those standing apart, and through the opening thus made the body is put in, and then the stone carefully replaced. Many of them seem to have been empty for ages. They occur everywhere, but chiefly in places where they think the spirits can have a good view of the water. Even over the bodies of foreigners the government has erected tombs, without waiting for orders or remuneration. In funerals, the mourners are attended by friends of both sexes, clad in dirty white cloth; boys with banners lead the procession, followed by men two and two. The mourners follow, wailing aloud, and needing to be supported by domestics, in the *abandon* of their grief. The coffin is carried by four men, in a red lacquered bier, others holding banners aloft on either side. The children in front, and the women behind, join the men in wailing, which is audible at a great distance. The disheveled appearance of the women adds to the gloom of the *cortege*. No priests are in the procession, but the number of friends is a pleasant feature where so much is depressing.

The government is a hereditary monarchy. The political institutions are based on the writings of Confucius. The islands have been under the control of Satsuma for more than two centuries. Old usages are maintained. The present sovereign [1] is only thirteen years of age, and the administration is nominally in the hands of a general superintendent, or regent, assisted by three treasurers, one for each prefecture of the island. Local magistrates, assisted by many police, are found in every place. At present the queen dowager has some voice in state affairs, but in fact, the agents of the ruler of Satsuma have supreme control, and though they keep out of sight, yet all classes live in constant fear of them. Strangers cannot understand this. Neither soldiers nor arms are to be seen, yet the whole people seem cowed and terror-stricken. The explanation is a wide-spread system of espionage, that makes every man a spy on every other, and compels all to live in constant fear. They fear to be seen with foreigners or to receive anything from them. When they bring a stranger to his ship, from the shore, they refuse remuneration; and if the money is thrown into their boat, they bring it back, for every man fears to be betrayed by the rest.

Situated between the powerful empires of China and Japan, the Lewchewans have sought to keep themselves secluded from both, and have shown kindness to all, as the only means of safety. In 1609, the Prince of Satsuma took their king to his capital, Kagosima, and compelled them to pay him tribute. No other Japanese are allowed to trade with them, nor can they go anywhere else in Japan. An annual tribute is sent to Fuhchau, and the vessel brings back

[1] 1853.

Chinese books and merchandise. The gentry send their sons to learn Chinese literature, and speak of that empire with respect, but seldom refer to Japan, professing ignorance of Tuchara, as they call it; they never admit that they are under its control.

The position of the islands was not learned till the present century. The agreeable accounts of Capt. Basil Hall[1] have been somewhat modified, for he never even suspected the espionage that was the real cause of much that he took for kindness. The same system of free supplies has been continued since, but the reason for it has only recently come to light, in the fear with which the people were inspired by those in authority, so as to maintain the non-intercourse in which they felt lay their only safety.

In Lewchew we see the effects of a well-organized government, supported by a system of law and education, in preserving nationality, securing the respect of other nations, and a fair degree of comfort at home. Less energetic than Africans or New Zealanders, none of their institutions rest on brute force. Confucius, not the war club, is the standard of right. Instead of tabu, cannibalism, and atrocity, are schools and regular officers of government. The benefits of a written language are also conspicuous, and show its value for the perpetuation of national existence. We must respect such a people, and a more full examination of their history and policy will be of interest to the ethnologist. For their mildness and kindness they deserve our esteem, and it is to be hoped that Europe and America will Christianize the nationality that China and Japan have so long treated with respect.[2]

HAKODADI.

Situation of Hakodadi. The town of Hakodadi lies on the southern coast of the island of Yesso, in latitude 41° 49′ 22″ north, and longitude 140° 47′ 45″ east, on the western shores of a small peninsula, which forms one side of the secure harbor before the town, and in full view of the Straits of Sangar. It belongs to the imperial fief of Matsmai, and is situated near the eastern boundary of the country of the Ainos, or aborigines of Yesso. There are few or none of these people now within this principality, and none are to be seen in the town. Hakodadi is a place of considerable native commerce, a large part of the supplies for the Ainos and the Japanese being stored here, as well as great quantities of produce brought in to exchange for these importations from the south. It lies about thirty miles eastward from Matsmai, the chief town in the principality, and is the second in importance on the island; the two are connected by a well-made road, running along near the coast, and both carry on a large trade with several small towns on the south side of the Straits of Sangar (more properly Tsugaru), and other ports farther south in Nippon.

The word "Hakodadi" means "box shop," applied to the town because it is little else than a warehouse for the goods imported from Nippon and elsewhere; the spelling "Chakodade," used in *Golownin's Recollections*, is incorrect. The town contains about eight thousand inhabitants, living in about a thousand houses, mostly stretched along for three miles in one main thoroughfare near the sea-side; the remainder form two or three parallel streets further up the hill. The shape of the peninsula bears a slight resemblance to that of Macao; but the whole town being seen at once, added to the greater height of the hills behind it, renders the view much more imposing from the sea. The highest peak, just behind the town, is about one thousand feet; the other three are upwards of six hundred; all of them, bare upon the summits, have their slopes covered with a low growth of shrubs and a few patches of pine trees. The groves of pines, maples, and fruit trees behind the town add much to its picturesque appearance, and, with its large buildings, give the impression of a place of wealth and taste.

The buildings are of one story, with an attic, occasionally making a commodious upper chamber, but usually only a dark cock-loft, where goods are stored or servants lodged. The height of the roof is seldom over twenty-five feet from the ground; the gently sloping sides are covered with pine shingles, not much larger than one's hand, which are kept in place by bamboo nails and long slips of board, and over these are laid rows of cobble-stones, sometimes so thickly as to cover the entire surface. One object in using these stones is to hasten the melt-

[1] 1817.

[2] A few sentences have been added from a journal of Dr. P. Parker, *Missionary Herald*, 1838, p. 204.

ing of the snow from the roofs. This heavy covering is supported by a framework of joists and tie-beams. The singular appearance which this gives the houses is increased by the tub of water placed on the gable, which, rising above the porch, fronts the street in Dutch style. The tub contains a broom or two with which to wet the house in case of fire. In the street, the many rows of buckets and tubs filled with water, with a small fire-engine and hose here and there, show the dread of fires, and the precautions taken against them. Fire-alarms are made of a thick piece of plank hung under a little roof, to be struck by watchmen in case of fire; while the charred timbers still lying about where a hundred houses had stood only a few months ago, prove the need of all these precautions.

A few of the better houses and the temples are neatly roofed with brown wedge-shaped tiles, laid in gutters like the Chinese; while the poor are content to shelter themselves in thatched hovels. The thatch, in many cases, is covered with a crop of grass, growing from seeds planted by birds, and presenting sad evidence of the poverty or unthriftiness of the inmates. The abundance of crows flying about the town reminds one of Bombay and other places in Southern India. Other birds, both land and sea fowl, were seen in great variety, but not in large numbers, except gulls and sparrows.

The raised floor is covered with stuffed mats, and can be partitioned off into two or more rooms, by sliding panels and folding screens. In the center is a brick fire-place, about three feet square, tiled around the edge and filled with ashes; the charcoal and wood are commonly brought in thoroughly ignited, and then burned on a brazier or handiron in the center. There is not much smoke when it is burned in this way; but in the cottages the annoyance from smoke is almost intolerable. In a few houses, a hole in the roof or side allows the escape of some of it; and then cooking is carried on in the same place. It may easily be imagined what gloomy abodes these are in rainy, wintry weather, with no glass windows to admit light, or chimneys to carry off the smoke, and the wind whistling through every crevice upon the shivering inmates. The poor spend much of their time in winter cuddling around the fire-place, while the rich load themselves with clothes to protect their bodies from the cold. In the largest establishments, there are small open courts between the rooms, sheltered from the wind, by which a dim light can be admitted through the windows; but the best houses in this town are cheerless abodes compared with even the glazed cottage of an English peasant; and one is surprised to see, among a people who have carried many arts to a high degree of excellence, so little progress in the art of living comfortably. Connected with most of the dwelling-houses is a yard, and in many of them is a kitchen or stable, also used for storing wood; the yard is sometimes used for rearing vegetables or cultivating a few flowers; sometimes a kitchen garden, with fruit and shade trees, indicates the greater taste as well as wealth of the occupant. In the house of the officers, there was an arbor or fancy rock-work garden at the entrance, which showed invitingly from the street, and did credit to the tenant.

Shops. The shops along the main street are often connected with the family residence in the rear, but quite as frequently with a mechanic's room. The goods in shops are packed in boxes or drawers as much as possible, only the coarsest pottery, grains, sandals, and common articles being exposed. The ceiling is about seven feet high, and the beams are hung with these articles. Besides the shops are numerous warehouses, built higher and with more care, and made as nearly fire-proof as possible. Their walls are two feet thick, faced with stone, and made of mud or rubble-stone, securely tiled on top, and entered by two or three large doors. Some of them have a loft; the window-shutters are of plank covered with iron. Some of the houses are entirely covered with fine plaster on the outside; and their substantial appearance stands in strong contrast to the unpainted, pine-board dwellings near them.

The shops in Hakodadi are stored with goods such as a poor people require. Coarse, thick cottons, common earthen and china ware, lacquered bowls, cups, and stands, durable silks, cutlery, and ready-made clothes constitute the greatest portion of the stocks. Furs, leather, felted cloths, glass-ware, or copper articles are rarely seen; nor are books and stationery very common. The provision stores contained rice, wheat, barley, pulse, dried and fresh fish, sea-weed, salt, sugar, saki, soy, charcoal, sweet potatoes, and flour, with other less necessary articles, and to all appearance in ample quantities. There is no public market, as neither

beef, pork, nor mutton is eaten, and not many fowls, geese or ducks; vegetables are occasionally hawked about. The artisans are chiefly blacksmiths, carpenters, barbers, shipwrights, lacquered ware makers, potters, and stone-cutters. The signs of the shops are written on the paper windows or doors in various devices and cyphers; some in Chinese characters, and others in Japanese, or a combination of the two.

Streets. The streets are about thirty feet wide; and wooden fences cross them at intervals with gateways. No wheeled carriages are seen, and they are kept commendably clean, sprinkled and swept frequently. The yards are surrounded with board fences, built close and high to conceal the interior; hedges and stone walls are occasionally substituted. The streets present a remarkable contrast to those in China, indicating less energy and traffic. No vociferous coolies or stalwart chair-bearers here thrust the idler aside; no clamorous dealers claim preference for their wares and viands; no industrious craftsmen work their trade along the side of the way; but quiet reigns in the streets, broken now and then by a stout horse-boy hallooing to his unruly beasts, an official attendant bidding the people prostrate themselves to the great man coming, or the clang of a busy forgeman in a neighboring shop. Yet the general impression is made that Hakodadi is a town of considerable wealth and trade; and the droves of pack-horses passing through the streets, the hundred junks at anchor off the town, their boats and fishing smacks passing from ship to shore and about the harbor, the tidy streets, and gentlemen with two swords riding through them on horseback, all strengthen this impression.

Environs. The environs of Hakodadi present little to attract. Beyond the town, eastward, are two forts, dug out of the ground, to guard the entrance to the harbor. Stakes are driven along the cuttings to retain the earth, and two wooden buildings, apparently connected with magazines underground, stand in the excavated area, which is paved with stones. Embrasures for only two guns are opened seaward, and these are each nearly four feet wide. There is a building at the eastern end of the main street on the beach, which seems intended for a fort; but it may be a parade-ground.

Climate. The climate of Hakodadi is probably not subject to the same extremes as the coast of Manchuria, in the same latitude; though the snow, lingering on the western hills on the first of June, showed that it is colder than New Bedford or Boston, about as far north, and with a similar exposure. At this date peach and apple trees were in full bloom, the wake-robin, sassafras, maple, willow, and snow-ball in blossom, and some of the trees around the town not yet fully leaved out.

Food. The animal food of the inhabitants chiefly consists of fish, clams, crabs, shell-fish, and other marine productions. Salmon are caught in the harbor in June, of a delicious flavor, besides herring, perch, plaice, shad, and eels. Poultry, eggs, and ducks, and perhaps a little rabbit or venison, afford additional variety; dogs, cats, and crows are numerous, but none of them are eaten. The dog is like the common Chinese variety, and is very common. The horses are small-limbed, and some of those belonging to the officers resembled barbs; but most of the pack-horses appeared half-fed and overworked. The price of the latter is from twenty-five to thirty-five dollars, while a fine riding horse was rated over two hundred dollars. No wagons or carts were seen; and all the internal freight is carried on horses, of which nearly a thousand were seen in the streets on one occasion.

Wheat, rice, pulse of various kinds, greens, and barley, with a great assortment of sea-weed, principally a species of *Laminaria*, form the staples of vegetable diet. No fruits or fresh vegetables were in season when the American squadron was in port. Fully one half of the food of the people comes from the sea, and the rank odor of drying fish and sea-weed meets one on the shore. The hamlet of Shirasawabi, on the eastern side of the peninsula, was insufferable from stinking fish; and its inhabitants presented a squalid appearance, which may probably be taken as the average condition of the people of Yesso, rather than that of the well-fed and clean townsfolk in Hakodadi. It should also be mentioned, that not a beggar was seen among them.

Trade. The people are stout, thick-set, more sturdy than those of Simoda, and not so fawning or immoral. Their average height is about five feet three inches; heavy beards are common, but none are worn uncut. They are mostly engaged in trade and shipping, depending on their importations for their breadstuffs. Junks come from the south side of the Straits of Sangar, from Sado Island, lying south of Matsmai, Yedo, Yechigo, Noto, Nagasaki, towards the western end of Niphon, and even Osaka and Owari on the south. The harbor contained more than a hundred junks, though it was the dull season, as the south wind had not yet begun to bring up vessels; and the authorities regretted they could not supply our wants. They declined to sell any rice or wheat or flour, on account of the uncertainty of the arrival of fresh stocks. Rice, sugar, spirits, cotton cloth, silk, iron, porcelain, and hewn stone are imported, for which they exchange dried and salted fish, sea-weed, charcoal, wheat, barley, deer's horns, timber, and other produce of Yesso. There is not much likelihood of the port soon becoming a place of much trade with American ships, but it can easily furnish supplies of wood, water, fish, especially fresh or dried salmon and perch, sugar, boards, eggs, poultry, and other articles, the variety of which will doubtless increase with the demand. As a place for a retreat from the heats of Shanghai and Canton, Hakodadi may by-and-by attract visitors, who will by that time doubtless be allowed to investigate the resources and topography of the whole island.

CHINA AND VICINITY.

In regard to the geography of China, it is hardly needful to do more than to refer the reader to the full and accurate pages of Dr. S. W. Williams. On this and every other topic relating to China, his *Middle Kingdom* is an unfailing instructor and most reliable authority. Dr. H. Blodget calls it the ripe fruit of his life-long studies, and a treasury of knowledge concerning Chinese affairs, which no student of the language can afford to be without. It is used as a text-book by the students of the British Legation in China. Though originally published in 1847, nothing has since appeared that supersedes it. It remains the most copious and trustworthy source of information on all that pertains to China.[1] Volume I (pp. 1–42) describes the general outlines of the empire; (pp. 43–120) the eastern provinces, their climate, coasts, chief cities, rivers, and islands; (pp. 121–150) the western provinces and their capitals. Then follows (pp. 151–205) a like account of Manchuria, Mongolia, Kokonor, Ilí and Khoten, Tibet and Ladak; (pp. 206–239) with an exhaustive treatise on the population[2] and statistics of the empire. The laws and plan of government (pp. 296–420), with its practical administration, are all set forth with a fullness of detail that leaves the scholar nothing to desire, save to master a work that gives him the key to everything Chinese.

There is an outline map of China in the *Missionary Herald* for 1869, accompanied by valuable notes on a variety of subjects (pp. 1–5).

Rev. Daniel Vrooman prepared a map of Canton and its suburbs, by which the British fleet was guided in its bombardment of the city in 1856. It was subsequently printed in 1860.

The *Chinese Repository* has many valuable articles on the geography of that country, as, *e. g.*, the valuable comments of Mr. J. R. Morrison on a native map of the empire (Vol. I, pp. 33–42, 113–121, and 170–179); Gutzlaff's voyages forming the staple of Vols. I and II. There is a description of Canton, with a

[1] Report has it that the author is preparing a new edition; if so, he who has it will need little else on China.

[2] See also *Missionary Herald*, 1879, pp. 50–51.

map (Vol. II, pp. 145–160, 192–211, 241–264, and 289–308); a review of the article "Canton" in the *Encyclopædia Americana* (Vol. I, pp. 161–169); an excellent critique on two Swedish voyages to China in 1750 and 1751, by Peter Osbeck and Olaf Toreen, and on an account of Chinese farming by Capt. Eckeberg, London, 2 vols., 1771 (Vol. I, pp. 209–224); another on Mr. Tomlin's *Journals from Singapore to Siam and Malacca*, by the editor, Rev. E. C. Bridgman (Vol. I, pp. 224–234); a review of Lewis LeComte's *Memoirs and Remarks on China* during ten years' travel, commencing in 1688 (Vol. I, pp. 248–268); national character of the Chinese (Vol. I, pp. 326–330); population of the empire (Vol. I, pp. 345–363, 385–397, and Vol. II, p. 32); climate of Canton and Macao, with meteorological tables (Vol. I, pp. 488–491); account of the island of Formosa, with a map (Vol. II, pp. 408–420); Chinese navy (Vol. II, p. 421); description of Peking, with a map (Vol. II, pp. 432–443, 480–500); imports and exports of Canton (Vol. II, pp. 447–472).

It would weary the reader to enumerate further, especially as the most valuable facts are embodied by Dr. Williams in *The Middle Kingdom;* yet, if any man thinks missionaries are men of only one idea, and make no additions to the sum of human knowledge, let him read over only the titles of other leading articles in these two volumes, and also in those that appeared after the publication of the two valuable volumes of Dr. Williams.

Volume I. A critique on an ancient account of India and China, by two Moslem travelers of the ninth century (pp. 6–15, 42–45). A review of a native work on Chinese biography (pp. 107–108). The Language of Corea (pp. 276–279). Catechism of the Shamans, or laws of the Buddhist priesthood in China (pp. 285–289). The sacred edict, containing sixteen maxims of the emperor Kanghe, amplified by his son, the emperor Yungching, with paraphrase on both, by a mandarin (pp. 297–315). Intercourse of China with foreigners (pp. 364–376). Historical sketch of Portuguese settlements in China, more especially of Macao, of Portuguese envoys to China, of Papal missionaries in China, and of Papal legates to that empire (pp. 398–408, 425–446), which is an unvarnished tale of the lawless methods by which Portugal, against the unavailing protest of the Chinese, acquired her foothold on their territory. Early introduction of Christianity into China (pp. 447–452). Father Alvarez Semedo's History of China, translated, London, 1665 (pp. 473–488). Worship at the Tombs of Ancestors (pp. 499–503). Then, in every number of every volume was a monthly record of current events, filled with accounts of piracies, inundations, famines, misdoings of the authorities, and many other things, giving a good insight into every-day life in China.

Volume II discusses the Chinese penal code (pp. 10–19, 61–73, 97–111); the Introduction of Vaccination (pp. 35–41); History and Chronology of China (pp. 74–85, 111–128); The Bugis Language, with an alphabet (pp. 85–90); Malays (pp. 93–95); Idolatry (pp. 166–176); Copperplate Syllabary of the Corean Language (pp. 135–138); Buddhism (pp. 214–225); Chinese Botany (pp. 225–230); Systems of Buddha and Confucius, compared by a Chinese writer in 1520 (pp. 265–270); Ophthalmic Hospital at Macao (pp. 270–276); Canton Dispensary (pp. 276–277); Disposition of Chinese toward Foreigners (pp. 277–281); Titles of Chinese Emperors (p. 309); Chinese Theology (p. 311); Proportion of Mantchus and Chinese in Office (p. 312); Condition of Females (p. 313); Navigation of the Yangtse Kiang (p. 316); Worship in Japan (pp. 318–324); Staunton's Embassy of Lord Macartney in 1793 (pp. 337–350); Spanish Relations with the Chinese (pp. 350–355); Free Trade with China (pp. 355–374, 473–477); Crawford's History of Indian Archipelago, Edinburgh, 1820 (pp. 385–408); Seamen in Canton (pp. 422–425); Burmah (pp. 500–506, 554–563).

As *The Middle Kingdom* was published about the close of 1847, it may be of service to scholars to mention some of the titles in the closing volumes of the work.

In 1847, we have a list of Foreign Residents in China (pp. 3, 346, 412); Protestant Missionaries there (pp. 12, 147); a notice of Rev. W. C. Milne's seven months' residence in Ningpo (pp. 14–30, 56–72, 104–121); On the Chinese words for God (pp. 30–39, 99–121, 351); The Opium Trade (pp. 39–46, 97–179); The Cotton Trade (pp. 47–50, 134); Mons. Hedde's Excursion to Changchau (pp. 75–84); New Charts of the Coast; Rules of the Canton Chamber of Commerce (pp. 87–92); Asiatic Society of China — Its Beginnings (pp. 92–96); Peter Osbeck's Canton and Whampoa in 1752 (pp. 136–141); A Trip to Fuhshan (pp. 142–147); Thos. Yeates's First Christian Missions in China (pp. 152–168); Biographies and Obituaries of Missionary Ladies in China (pp. 168–179); A Demonstration under Major-General Aquilar (pp. 182–202, 252–265); The Religion of the Chinese (pp. 203–207); Chinese Grass-cloth (p. 209); Thomas Allom's Chinese Manufacture of Silk (pp. 223–236); Robert Thom's Chinese Speaker, with notice of author (pp. 236–245); Manifesto from Chinese Merchants to English Merchants (pp. 247–251); Premare's Notitia Linguæ Sinicæ (p. 266); Chinese Currency and Revenue (pp. 273–297); Obituaries of Mrs. Marshman and Mrs. Morrison (p. 297); Protest from Honan to the British Consul at Canton (pp. 300–363); Visit of the French to Cochin China (p. 310); Shipping at Canton, 1846 (p. 314); Shipping at Shanghai (p. 356); Peet's Plea for China (p. 321); Chinese Fire Regulations (p. 331); Letter of Mons. Grandjean (p. 335); List of Missionary Books published east of the Ganges (p. 369); Riot at Canton in 1846 (pp. 382, 425–465); Voyage from Canton to Shanghai (p. 398); Bibliotheca Sinica by Dr. Milne (pp. 406, 448, 500); Commissioner Lin's Ocean Kingdom, with maps (p. 417); Readings in Chinese Poetry (p. 454); Fuhchau Fu, by S. Johnson (pp. 483, 513); Proclamation of Bishop Ludovic, of Shanghai (pp. 246, 506); Shanghai (p. 529); Fortune's Wanderings in China (p. 569); Bishop Le Fevre's Cochin China (p. 584).

In 1848: English and Chinese Calendar (pp. 1, 419); Infanticide, by a native writer (p. 11); Chinese Terms for God, by Bishop Boone (pp. 17, 57); by W. H. Medhurst (pp. 105, 161, 265, 321, 414, 489, 545, 600); Revision of Chinese New Testament (p. 53); Meadows' China (p. 90); Chinese Sacrifices (p. 97); List of Protestant Missionaries (p. 101); Report of Ophthalmic Hospital, Canton, for 1847 (p. 133); Attack on English Missionaries at Tsingpu (pp. 151, 401); Medical Missions in China (pp. 188, 242); Address to Foreigners by Chinese against eating beef (pp. 260, 459); Colonial Surgeon's Report for 1847 (p. 313); Shangti not Jehovah (p. 357); Chinese Form of Prayer in Fulfillment of Vows (p. 365); Capt. Howe's Captivity in Cochin China (p. 366); Memoirs of Father Ripa (p. 376); Hedde's Description of the Silk Region of Shunteh (p. 423); Chinese Lexicography (p. 433); Cities of Kiating and Nantsiang (p. 462); Shanghai (pp. 468, 530); Proclamation allowing Papal Missionaries at Sukia Hwui (p. 477); Murder of a Grandmother and Lynching of the Murderer (p. 480); Shower of dust at Shanghai (p. 521); Chinese map of military stations of Kiang Su (p. 536); Four Years' Thermometer at Shanghai (p. 527); Reminiscences of Shanghai, by J. R. Morrison (p. 528); Illustrations of Scripture from Chinese Customs (p. 537); Chinese accounts of the regions west and north of China between the fifth and eighteenth centuries (p. 575); Illustrations of Men and Things in China (p. 591); Chinese Moral Anecdotes (p. 646); Chinese Works of American Tract Society (p. 649).

In 1849: Eras in use in Eastern Asia; Calendar; List of Foreign Residents, Government officials (pp. 1–12); Chinese Writers on Tea Plant (p. 13); Historical Sketch of Shanghai (pp. 18, 384, 515, 574); Bibliographical Notices of English and French Works on Siam (p. 23); Report of Morrison Education Society for 1848 (p. 33); Chinese Philosophy (p. 43); Protestant Missions in China (p. 48); Biot's History of Public Instruction in China (p. 57); Bowring's Hot Springs of Yungmak (p. 86); Shin and Shangti (pp. 100, 102); by Dr. Bowring (p. 600); by Sir G. T. Staunton (p. 604); Prices current in Shanghai (p. 109); Bazin's Chinese Theatre, with Drama in Four Acts (pp. 113–155); Native Preacher on the Sabbath (p. 156); Chinese Moral Anecdotes (p. 159); A Chinese Dictionary of the Twelfth Century (p. 170); Memoir of the Philosopher Chu of the Twelfth Century, by Kau Yu of the Seventeenth Century (p. 187); Sale of Official Rank (p. 207); Hemp and Grass-cloth (p. 209); Capt. Ross's Land Trip from Hainan to Canton, in 1819; Annals and Genealogy of Confucius (pp. 254, 337, 393); Memoir of Abeel (p. 250); Oath of the Triad Society (p. 281); Foreign Trade with China in 1847 and 1848 (p. 295); Mulberry and Silkworms (p. 303); Cruise of the United States Sloop "Preble" to Napa and Nagasaki (p. 315); Chinese Cosmogony (p. 342); Biot

on the Condition of Slaves and Servants in China (p. 347); Worship of Ancestors (p. 363); List of English and French Works on China (pp. 402, 657); Chinese Directions for Cotton Cultivation (p. 449); Philology of word Fung or Wind (p. 470); Ancient Intercourse with China through Central Asia opens a Way for the Knowledge of Christianity (p. 485); Missionary Hospitals in China (p. 505); Topography of Kweichau (p. 525); Assassination of Governor of Macao (p. 532); Indian Notices of Grass-cloth (p. 554); Meadows on Tenure of Real Estate in China; Topography of Yunnan (p. 588); Goddard's Vocabulary, and Meadows' Translations from the Manchu (pp. 604–642); Romish Missions in Mongolia, by Rev. E. Huc (p. 617).

In 1850: Calendar, etc. (p. 1); Labors of Dr. Bettelheim in Lewchew (pp. 17, 57); Chinese Terms for God (pp. 90, 185, 280, 345, 409, 445, 465, 478, 486, 524, 569, 625); Topography of Hupeh (p. 97); of Hunan (p. 156); of Shensi (p. 220); Island of Tarakai (p. 289); of Sz'chuen (pp. 317, 394); Shanghai (pp. 105, 227, 330, 390); Famine in Shanghai (p. 111); Paul Su's Apology for the Jesuit Missionaries in 1617 (p. 118); Chinese account of Japan (pp. 135, 206); Etymologicon of Hüshin (p. 169); Military Achievements of the Kings of the Great Pure Dynasty (p. 241); Russian Ode to the Deity (p. 245); Movable Chinese Types (p. 247); Medical Missions (p. 300); Ophthalmic Hospital at Canton, 1848 and 1849 (p. 253); Account of Some Chinese Deities (p. 312); Showers of Sand in the Chinese Plain (p. 328); Dr. Macgowan on Coal in China (p. 345); Rev. W. M. Lowrie (p. 491); Yellow River (p. 499); Foreign Trade with China for 1849 (p. 513); Two Mongolian Letters to Philip the Fair, in 1305 (p. 526); Pagodas in and near Canton (p. 535); Versions of the Bible in Chinese (p. 544); Buddhist Tenets in Siam (p. 548); Monument (Nestorian) at Singan Fu (p. 552); Topography of Kansuh (p. 554); Huc's Tartary, Tibet, and China (p. 650).

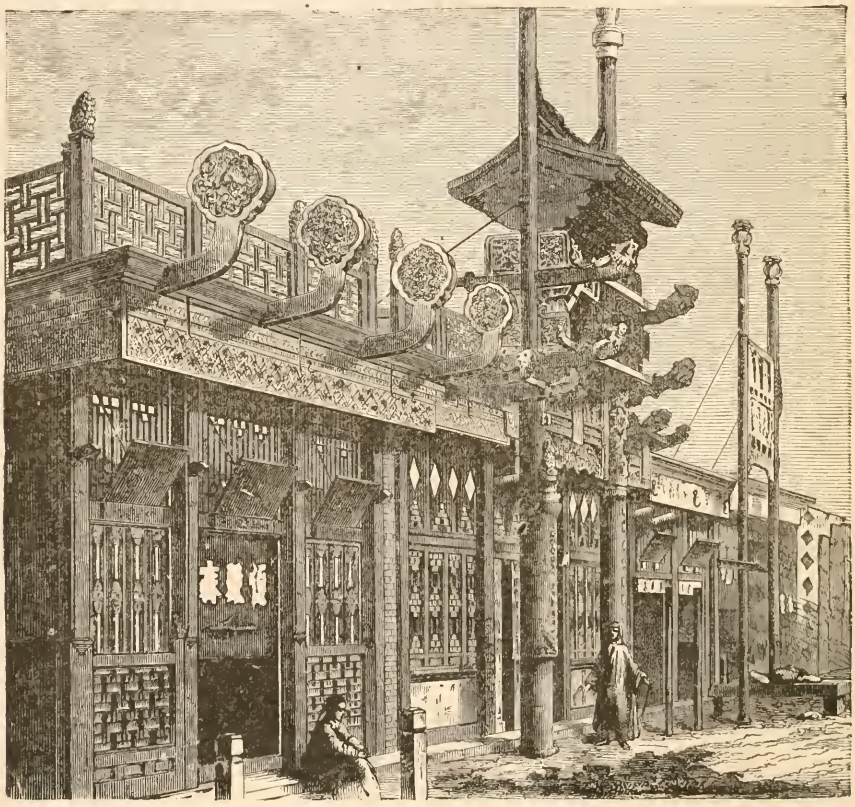
There were twenty volumes of the *Chinese Repository*. The *Chinese Recorder and Missionary Journal* commenced at Fuhçhau in May, 1868, under the editorial care of Rev. S. L. Baldwin.

Though the empire was long inaccessible, it has now been traversed extensively by our missionaries. Mr. Aitchison lived near Shanghai, and in one of his tours he was arrested and politely sent back. Dr. H. Blodget was the first Protestant missionary to enter Peking. In 1862 he ascended the grand canal to Teh-chow. He also went to Pan mountain on the north, to Shensi, and to Lama Mian, five hundred miles north of Tientsin, a great cattle mart in Mongolia. He says the mountains of Shensi and Mongolia are interesting fields of labor. The colloquial Mandarin prevails in all the provinces north of the Yangtse Kiang, in Yunnan, Kweichow, and in parts of Hunan and Kwangsi. In 1871 he traveled two hundred miles southwest from Peking to Chingting fu. A Buddhist temple there contains an idol nearly one hundred feet high, and a Papal cathedral stands within a stone's throw. Opium was everywhere, and for two thirds of the time he was never out of sight of growing poppies.[1]

Peking is situated on a great plain, in 39° 55′ north latitude, and 116° 28′ east longitude. It is enclosed by distant hills on all sides but the south. It was made the capital of China first for a few years in A. D. 937. Kublai Khan again transferred the capital here in 1280. Having been removed to Nanking in 1369, it was brought back by Yungloh in 1411, and has remained here ever since. Peking consists of two unequal portions; the inner, or Tartar, and the outer, or Chinese city. A wall thirty-five feet high and twenty-five feet in breadth encloses the whole, and another wall four miles long divides the two, with three gates, always closed at night. The Tartar city includes (1) "the

[1] *Missionary Herald*, 1871, p. 354.

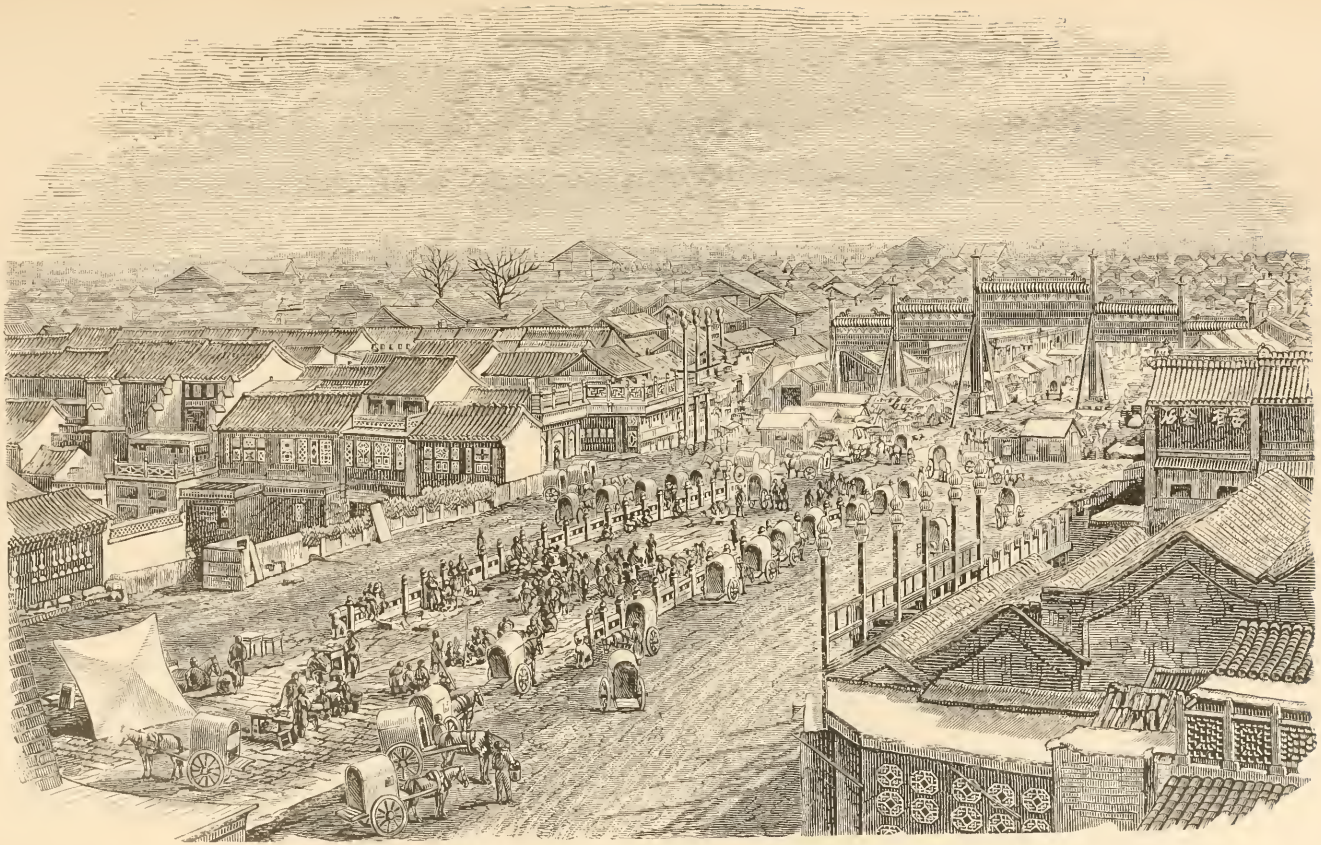
forbidden city," half a mile long and two thirds of a mile broad. Here are the palaces of the emperor. Outside of its high wall is a moat full of water, forty feet in width; also (2) the imperial city, six miles in circumference, occupied by the nobility, soldiers, and numerous public buildings; and lastly (3) the city proper, with a circumference of fourteen miles. The principal avenues are eighty feet wide, and on these are the shops and warehouses, like the one here represented. The side streets and lanes, from twenty to thirty feet in width, contain the houses and smaller shops.



MERCANTILE WAREHOUSE, PEKING.

The large engraving gives a view near one of the principal gates, and presents a very lively scene. The numerous carts are waiting to be hired. The bridge seen here crosses a canal, and is so noted for their numbers in its vicinity that it is called the "Beggars' Bridge." Here is a specimen, also, of a Chinese memorial gate, erected to commemorate victories, or in honor of some great man. Not far from this bridge are the markets, theaters, and several large temples; also the inns for the accommodation of the thousands who visit Peking for business, or to attend the literary examinations which are the measure of political preferment.

The summer here is longer and more debilitating than in New England.



PEKING.

The mean annual temperature is 53°; in winter 26°, and in summer 80°. It is very dry in winter. No rain fell from October 17, 1873, till April 21, 1874, and the next shower was on May 10th; but in summer the rains are abundant. In the summer of 1874 there were thirty-two rainy days, and the rainfall was eighteen inches.[1]

In 1875, Messrs. C. Goodrich, C. Holcombe, and A. H. Smith went to Singan fu, one thousand miles southwest from Peking, the ancient capital of the empire, where Nestorians planted churches long before Luther. On the way, two days of painful climbing up and down steep and rocky mountains, on an execrable road, brought them to a city in a region of coal and iron. Three days more brought them to the lovely central plain of Shansi, and its capital, Tai-yuan fu. Many of the houses at a distance resembled turreted castles. Two more hard days brought them to the southern plain of Shansi, extending to the Yellow River. Crossing into Shensi, they reached Singan fu, where high ministers of state became Christians, and the Nestorian monument still bears its silent witness to the truth. It was erected eleven hundred years ago, and is waiting for the return of the whole region to Christ. Mr. Holcombe's journal is full of geographical information.[2] He estimates the population of Shansi at fourteen millions, and of Shensi at ten million two hundred and fifty thousand, with a climate as healthy as New England. Rev. J. T. Gulick writes of the region round Kalgan. He describes the Mongols as far behind the Chinese in civilization, yet in eastern Mongolia as well off; their houses built of mud, with paper windows; most of them shepherds, carrying their frozen meat to Peking in winter, the whole family going mounted on horses and camels: yet they are not nomads, remaining year after year in the same place. It is significant of the scholarship and standing of our missionaries in China, that Dr. P. Parker, Dr. S. W. Williams, and Rev. C. Holcombe have been appointed secretaries of legation to our government in that empire.

EAST INDIES.

In a volume intended to set forth the tangible results of foreign missions, it would be unpardonable to overlook the deeds of some who, though not formally ordained to the work by man, were nevertheless truly called to it of God, and, in what some speak of as their secular callings, were as truly consecrated to the work as any ordained missionaries. The mercantile firm of Olyphant & Co., in Canton, may be taken as a worthy representative of this class. It was composed of D. W. C. Olyphant, Chas. N. Talbot, Chas. W. King, and W. H. Morss. It is a great pleasure to transcribe their names, for if the Lord preserves even the insects of previous eras in the amber of this, surely it is pleasing to him to preserve the memory of good men. They went to China, not to make money, but as servants of the Lord Jesus Christ, to improve every opportunity for the advancement of his kingdom. They felt it as much a duty to serve Christ in their business as the missionary in his preaching. According

[1] Dr. A. O. Treat in *Missionary Herald*, 1875, pp. 257–260.

[2] *Missionary Herald*, 1875, p. 199; *Transactions* of No. China Branch of R. A. Society, Vol. X, pp. 55–70.

to the testimony of one who knows,[1] American missions to China were begun in 1829, at the suggestion of Mr. Olyphant. He supported them when their expenses were startling and the prospect of success very remote. The firm furnished a house in Canton rent free to the mission for thirteen years. The church to which he belonged in New York sent out, at his suggestion, in 1832, a complete printing office, called the "Bruen Press," in memory of their late pastor. When the *Chinese Repository* commenced, that year, he guaranteed the American Board against loss in the undertaking. He built the office it occupied in Canton for a number of years. The ships of the firm gave fifty-one free passages to missionaries and their families. But the special service which we wish to record was rendered in 1837. At that time the outlook for missions in eastern Asia was most discouraging. Excepting Singapore and Pinang, almost the entire Indian Archipelago was under the control of the Spanish or the Dutch. The former prohibited Protestant missions entirely, and the latter followed very far in the same direction. Even in Bangkok, Canton, and Macao, where Protestant missionaries were allowed to live, their work was underground rather than in open day. They lived in hope of the opening of their prison doors.

At such a time this firm purchased the brig "Himmaleh," and fitted her out from New York, at a cost of $20,000, to explore the coasts of eastern Asia, in the interest of science, commerce, and missions. The missionary Gutzlaff was expected to go on the tour, but, as he was hindered, Rev. E. Stevens, of the American Board, and G. T. Lay, agent of the British and Foreign Bible Society, were sent in his place. Capt. Fraser was liberally supplied with presents, to open the way for the missionaries, but, both from the cargo and the presents, opium and fire-arms were rigidly excluded; for even at that early day it was well known that Olyphant & Co. had nothing to do with the opium trade.

The "Himmaleh" left Macao December 3, 1836, and arrived at Singapore on the 15th, where Mr. Stevens died, and Rev. J. T. Dickinson, of the American mission, and Rev. S. Wolfe, of the English, were taken in his place; but neither of them was proficient in the Chinese or Malay languages. Mr. Wolfe died at Zamboangan, in Mindanao, where, of course, his body was refused interment in the Papal Spanish cemetery. Mr. Lay felt, however, that the religious activity of the Spaniards was preferable to the apathy of the Dutch, for religion, though presented to the people under its most disadvantageous form, had yet done much to soften the hearts and enlighten the minds of the natives. The government paid a sincere respect to the priest, who was allowed to labor free from those restrictions and that constant interference which hampered the labors of the Dutch pastor. The brig returned to Singapore in August, and the effort was attended with so little success that she was sent back to New York. We give a few brief statements condensed from the journal of Mr. Dickinson.

He left Singapore February 1, 1837, and reached Makassar on the 10th. The shore was lined with cocoa trees, and behind these appeared small patches of sugar cane and paddy fields. The situation of the town is flat, and rendered unhealthy by the rice fields. It is enclosed by a wall one third of a mile long,

[1] Dr. S. W. Williams, *Chinese Recorder*, Vol. VII, p. 397.

on each of the four sides. The houses were of brick, covered with stucco, and roofed with tiles. They stood in clusters, with cows and horses grazing near them. High mountains formed the background of the picture. In port were thirty Bugis prows, two Dutch men-of-war, and a merchantman. The natives reside outside the wall, and its gates are closed at night. The Bugis live to the north, and the Makassars to the south, with the town between. The palace of the Bugis rajah was built of bamboo, with some European furniture. The district extends three miles along the shore, and half a mile into the interior of the island. Its population is twenty thousand: eight thousand Makassars (pronounced Mangkarsar), five thousand Bugis, three thousand Malays, one thousand Chinese, five hundred Dutch, and some from other islands. The Dutch school numbered fifty-three half-caste boys and thirty-eight girls. The principal had three assistant teachers. A Chinese school of sixteen boys contained thirty-three the year before.

The Boni tribe here had been expelled by the English during their domination, and Mr. Dickinson visited the tombs of their rajahs, a mile back from the town.

The southern part of the island, between the Bay of Boni on the east and the Straits of Makassar on the west, is one hundred and forty miles long by sixty in breadth, and is the most important part of Celebes. Here are all the Makassars,[1] and nearly all the Bugis.[2] Beginning at the northwest and following round the coast, are the districts of Sidenring, Barru, Sopeng, Panjana, Tanete, Marus, Tello, Makassar, Goa, Topo, Java, Turataya, Bontain, Bulukumba, Boni, Waju, and Luhu. Each of these is described in detail; so is the lake Lubaya, twenty miles long, and one hundred feet above the sea. The mountains rise between five and six thousand feet. Many small rivers descend from them on both sides.

The languages spoken are the Makassar and Bugis, both of which use the same alphabet; the Bugis adding a few letters. The classification of the letters follows the Sanskrit, and, though the proportion of readers is small among both, it is largest among the Bugis. The Portuguese arrived here in 1512; the Dutch followed in 1660, and in 1669 took Sambaopo, the last stronghold of the Makassars. The rajah is elected by the nobles, and women are eligible to the throne.

In 1512 Mohammedanism was scarcely known; now it is the religion of this part of Celebes, having been forcibly introduced by the Malays. The Alfoors in the central and northern part of Celebes are heathen, resembling the Dayaks in their customs. The character of the natives is even worse than that of the Malays; though energetic, they are proud, avaricious, and treacherous to an extreme.

At Bontain, Mr. Dickinson landed under a mountain, whose top was hid in clouds, and its sides adorned with fields and forests. Here, in company with his Dutch hosts, he rode on horseback a mile along the beach, then climbed up by a winding path, through the richest vegetation, passing now fields of maize, now through fields of grass, and again under the shade of tall trees, whence he

[1] 300,000. [2] 600,000.

looked down on the bay and the isle of Salayer, fifty miles away. Nearer, cocoanut groves dotted the beach, and tala palms grew in the ravines; paddy fields, and here and there little cottages on the sides of the hills. The eye passed on from field to field, from smiling valleys to lofty cliffs, and from peak to peak up to the summit, turbaned with its wreath of clouds. At the end of the ride, they left ponies, shoes and stockings, and, clambering along the slippery rocks, reached a waterfall one hundred and fifty feet in height. It resembled Montmorenci, only with scenery far superior. The rock of the mountain is trap.

The population of Bontain is about fifteen thousand; some are gardeners, and some traders. There are only eight Chinese, all of whom deal in opium. About fifty call themselves Christians, and the rest are Moslems, but there are no Arabs. Their Imams, who teach to read the Koran, are supported by the offerings of the people.

The island of Salayer has perhaps sixty thousand inhabitants, all Moslems. Their language differs from the Bugis and Makassar, yet they use the same alphabet. Rice does not grow there, and maize is the principal grain.

Passing the island of Butung, or Boutong, over one thousand five hundred feet in height, he saw a campong up two thirds of the ascent. There are four of the Xulla or Zula Islands: Tulyubo, Mungala, Bessy, and Lissamatula; the two former, each fifty miles in length. On Ternati and Tidore he found landscapes resembling those of Bontain. The conical peak of Tidore rose five thousand feet, guarded by five smaller cones. The shores of Gillolo (Halmaihera) were high and covered with verdure. The bazar at Ternati was well supplied with fruits, among them the durian and mangosteen. It is the land of fruits. Here he found a Dutch congregation of one hundred and fifty assembled for worship on the Sabbath. The streets and houses are neater and more comfortable than in other islands. The fences are made of bamboo. Slats of the same form the sides of the houses, which are thatched with palm leaves. Shrubbery of all sorts abounds, from the coffee shrub to the tree of the forest. The roads are broad and smooth enough for carriages, and grand scenery appears among the hills. Here Mr. Dickinson ascended a volcano, breakfasted one thousand eight hundred feet above the sea, and was much interested in the marvels of the botany of the region. The rock here, too, was trap. The top of the crater is five thousand and sixty feet above the sea. The ascent occupied six hours and a half, and the descent three. The ascent of Table Mountain, at the Cape of Good Hope, was little more than half as laborious. At one place the stream of lava is half a mile wide, and can be traced by the eye from the sea to the crater.

He visited the sultan of Ternati, passing from the gate of the palace between ranks of soldiers, some of them wearing the Dutch uniform. A few had helmets, shields, and breastplates, all of brass. A band of music played, and the room, sixty feet by forty, was furnished in European style, with sofas, chandeliers, and pictures. Conversation was carried on in Malay, Ternati, Dutch, and English.

The sultan rules Motir, Makian, the Zula Islands, the northern part of Celebes, and the northern portion of Gillolo, which is only the name of a small

town on the island, originally mistaken for the name of the island, which the natives call Halmaihera.[1] It is more than two hundred miles in length, but has only three thousand inhabitants. Halmaihera has six or seven different languages. The southern portion is Moslem, and the northern heathen. The people whom Mr. Dickinson saw from there were nearly naked. The sultans of Ternati and Tidore have each fourteen thousand rupees annually from the Dutch, on condition that they destroy all the spices; and they comply with the demand. The Moluccas, *i. e.*, Ternati, Tidore, Motir, Makian, and Batchian, produce cloves and nutmegs, and could easily supply the world. Milton speaks of

> . . . Ternate and Tidore whence merchants bring
> Their spicy drugs.

But the natives make these names each trisyllables.

Ternati has about five thousand inhabitants, and Tidore six thousand. The sultan of this last rules the southern part of Halmaihera, and a few small islets besides, his own island having not over twenty thousand subjects in all. The other sultan has at least four times as many.

In Ternati there is a Dutch school of forty-five pupils, whose teacher receives $700 annually, part from the government and part from his pupils.

The population of the Moluccas does not exceed two hundred thousand, and the number of their languages is twelve.[2]

One of our missionaries at Singapore made a collection of Malay and Bugis manuscripts, relating to the history, customs, and mythologies of native tribes little known. It is the best collection extant, and was brought to this country by the United States Exploring Expedition.

As the "Himmaleh" had not returned to Canton, and there were seven Japanese shipwrecked sailors, the returning of whom to their homes Messrs. Olyphant & Co. hoped might prove the means of opening up the empire of Japan, they resolved to make the experiment at their own cost, and so sent thither the good ship "Morrison," Capt. David Ingersoll; with him went Dr. Peter Parker, well supplied with medicines, vaccine virus, and anatomical and surgical plates, such as were fitted to interest intelligent natives; also Dr. S. W. Williams, as naturalist. Presents were sent with them, such as a pair of globes, a telescope, barometer, American coins, books, paintings, among them a portrait of Washington; also documents in Chinese, such as Pearson's *Treatise on Vaccination;* one gave an account of the shipwrecked men whom they sought to return. (Three of them were the sole survivors of a crew of fourteen; their junk sailed from Toba in November, 1831, and, after being driven about for fourteen months in the Pacific, was cast ashore in Oregon. The Indians plundered them and made them prisoners, but they were rescued by a factor of the Hudson's Bay Company, and sent to England, whence they had been forwarded to China.) Another document had for its subject the United States, its history and commercial policy; and others made various friendly offers of medical help and instruction. The ship proceeded to the Lewchew islands, and waited there a few days for the Rev. Mr. Gutzlaff, who was to

[1] Great land.

[2] *Missionary Herald*, 1838, pp. 171–179, 227–232.

follow in the British sloop-of-war "Raleigh." Dr. Williams made the most of his opportunities here to learn about the islands and their inhabitants, as the reader may see in his journal published in the *Chinese Repository;*[1] and Dr. Parker vaccinated a native physician, and left him a supply of virus, with Dr. Pearson's treatise. July 15th, Mr. Gutzlaff arrived, and the "Morrison," as soon as he came on board, left for Japan. The voyage is described at length by Dr. Williams,[2] but we can only say here that, in spite of repeated attempts both in the bay of Yedo and in that of Kagosima, they were driven off most inhospitably at the cannon's mouth, one ball striking the bulwarks and ploughing up the deck; that, too, though the "Morrison" had purposely left her armament at Macao, and Mr. King had taken Mrs. King with him, as an additional token of friendly feeling. The Japanese knew all this, and those who visited the ship seemed friendly enough till compelled by superior authority to pursue another course.

The captain did his part well, extricating his vessel with great skill and coolness from under fire on both occasions. The secret of this appears in his words when the first balls came whizzing over him: "Fire away! God knows we are here on a good errand, and he will not let you hurt us." Sixteen years after, Dr. Williams landed with Commodore Perry within a mile of the spot where the guns were planted, attended by an escort of six hundred sailors and marines, to carry the letter of President Fillmore to the Japanese emperor, and Commodore Perry named the steep point near by, Ingersoll Bluff, in honor of the good captain. Though those seven shipwrecked Japanese were thus cruelly forbidden to return to their families, two of them were the first-fruits of Japan to Christ, and also rendered assistance in translating Genesis and Matthew, John's Gospel and Epistles, into their language. Five of them maintained daily prayer in Dr. Williams' house for two years, and their harsh repulse was one of the pleas they urged why God should send his Gospel to their countrymen. If Mr. King had lived till the signing of the treaty of Kanagawa, March 31, 1854, he would have found all the objects of the voyage attained in God's own good time and way.[3]

Meanwhile, by this voyage and his subsequent studies in Japanese, God was training Dr. Williams for the post that he filled so ably, of interpreter to the expedition of Commodore Perry. It is much easier to find officers for such expeditions than intelligent and trustworthy interpreters.

SUMATRA.

Rev. J. Ennis sailed from Batavia, June 29th, the same year, in a vessel of one hundred and fifty tons, which carried, in all, one hundred and fifty souls, including the crew and a company of native soldiers. July 8th he landed at Bencoolen, on the southwest coast of Sumatra. The territory of that name extends from twelve to fifteen miles inland, and thirty miles along the coast; with a population of twenty-five thousand Malays. The Rejangs live still further inland, with a language and alphabet of their own. Their annals, laws, and poetry they write on plantain leaves and bamboos. Some have become Moslems, but, though they swear falsely on the Koran, an oath by the graves of their fathers is held sacred. Southeast of these live the

[1] Vol. VI, pp. 209–229.

[2] *Chinese Repository*, Vol. VI, pp. 353–380.

[3] *Chinese Recorder*, Vol. VII, p. 387–398.

Lampongs, who also write an alphabet of their own. The Dutch have a number of government officers among them. From Bencoolen he sailed to Padang, and set out for the interior, July 31st, along a plain five miles in breadth, and in places marshy. This extends back to mountains that rise above the clouds, which were then drenching them with showers. Next day he crossed a river on a Malay ferry-boat, made of two canoes joined by a platform of plank, and drawn across by a rattan rope hung on posts across the river in reach of the ferryman. The road was good, and he passed eight or ten Malay villages in eighteen miles. The houses are built on piles, a few feet above the ground, and in fine weather the sides are removed, leaving only the roof and floor. The first day the road lay through forests, entangled with vines and large-leaved plants; on the second he passed through fields of corn and rice. Priests and churches were scarce, and so were schools. On the third day he entered the rugged scenery of the mountains, the solitude enlivened by the chatter of monkeys. Cascades were frequent — one fell over a rock a hundred feet, in one solid sheet. The houses were now better built, and both the dress and the gardens of the people showed a higher civilization. He found some women dressed in silk of home manufacture. The mountains were now eight thousand feet high, and not more than twelve miles apart, the space between full of waving rice fields. A garrison of two hundred soldiers held Fort Dekock, or, as the natives call it, Bukit Tinggi, the high mountain. On market days thousands of people throng the streets. Their chief amusements are cock-fighting and gambling. One third of the people he met carried fighting cocks. Even coolies had their favorite bird, and a kris or dagger in addition to their loads. Mr. Ennis saw about sixty game-cocks in the market, though it was not a market day, each fastened by its string to a peg in the ground; two, armed with iron spurs, were fighting on a wooden platform, and three hundred men looked on with breathless interest, till one of the two fell dead. August 7th, Mr. Ennis left for Matua. The soil where he passed was a mixture of clay and sand, and the streams had worn ravines nearly two hundred feet in depth. The road was constantly ascending or descending. In a valley filled with rice fields, a lake about the size of the Sea of Galilee was hemmed in by mountains. The water was of a deep blue, and three or four white clouds hovered overhead in the calm, clear sky. Ten villages, with a population of fourteen thousand, lay around the lake. In each was a mosque. He saw a war canoe seventy-four feet long. Bloody battles were formerly fought on the lake, between two hostile tribes. Under Dutch teaching, they now make silver spoons equal to the European pattern given them to copy. Those not Moslems pray and offer sacrifice to Satan; and if a house burns, instead of water they bring mirrors, that the author of the mischief, seeing his ugly face in them, may flee and let the fire go out.

Passing through Bambang, at Kumpulan he was within fifteen hours of the country of the Battas, but had to return to Matua on account of a war then raging.

On the 17th, he was at Tandjang Alam, in a beautifully cultivated region, the rice fields irrigated by wheels turned by the stream, as in northern Syria. In Lima Puluh he found the people more highly civilized than elsewhere. Good roads — one of them sixty feet wide — were generally lined with hedges, while horses, cattle, goats, and poultry indicated wealth and thrift. To the northeast lies the country of the Siaks, who in language and appearance do not differ from other Malays. Their territory is populous and well cultivated, though little known. He passed through a district where one hundred thousand people are said to live within a circle of ten miles in diameter. From Alabang he went to Pogaruyong, where he was at the center of the Malayan people. They have a literature, though the proportion of readers is small. In manufactures they show excellent capacity. They make good brass cannon, and the work of their goldsmiths compares well with that of the same craft in Europe. They introduce gold threads into their silks. In agriculture they use the plough, hoe, and other implements of their own. Their principal food is rice; but they have also potatoes, yams, sugar cane, coffee, and many fruits. Mr. Ennis passed through a rice field eight miles in length and four in width, formed into successive terraces for convenience of irrigation. The people raise excellent fish in artificial ponds.

Two or three mountain ranges run parallel with the southwestern coast of the island, sometimes at a distance of fifty miles, and sometimes sending out spurs to the shore. Some peaks are from ten thousand to fourteen thousand feet high. In the forests, the elephant, tiger, deer,

and wild hog abound. The tropical vegetation keeps the earth moist, and many small streams run down to the sea. Beyond the first range lie the cultivated regions already described; but further to the northwest lie the populous Batta countries of Mandeling, Ankola, and Tobah, and Mr. Ennis set out for these from Natal, on foot, September 18th.

The first day he passed over a muddy road, and got drenched in a shower. Next day he followed a foot-path through the grass, and now and then had to wade long distances up the stream. He crossed several streams, two of them by a bridge of rattans, so narrow that one foot could not rest by the side of the other; a rattan rope was provided on each side, for a railing, and the torrent, one hundred and thirty feet wide, raged far below. Sometimes he had to wade up to his waist, and in the morning put on the wet clothes he laid off the night before. At the close of the fifth day he reached a small Dutch fort, and then began the ascent of the last range. This required two days to cross, and was so steep in places that only the roots of trees enabled him to climb. The crest of the mountain was extremely narrow, with a deep gulf on either side. On it he passed several graves of men who had died on the journey. At the foot of the range he found the first village in Mandeling, and the people at work on a road that was to pass down on a lower level to Natal.

Mandeling was overrun in 1817 by the Moslem Malays of Rau, thirty miles to the southeast, and ten years later was completely subdued and converted by force to Mohammedanism. The men of Rau killed their pigs, circumcised their men, and taught their young chiefs the Koran. Three years later the Battas invited the Dutch to help them, and they came to stay. Ankola has lately sought the same assistance, and Tobah has also received them. The present Dutch Resident represents the people to be the most docile in the world. The climate of Saninggo, where he resides, is temperate and healthy, and the villages are very numerous. Mandeling and Ankola lie between two of the ranges of mountains that run along the center of the island; on the east lies Tombusi, a fertile, populous district. The plain of Saninggo is twenty-five miles long by ten in width, surrounded by high mountains, and in four of its villages has ten thousand people; forty smaller villages have about fourteen thousand more, making twenty-four thousand in all. The entire Batta people are estimated loosely at a million and a half.[1]

Mr. Ennis also visited the islands of Bali and Lombok, lying between Java and Sumbawa, during August and October, 1838. The first contained a population of from seven hundred thousand to eight hundred thousand, and the last about one hundred and eighty thousand. For many interesting particulars about the country and people, we can only refer the reader to the *Missionary Herald* for 1839, pp. 321–334.

In recording the contributions of missionaries to geography, we must not overlook those made by our martyred missionaries in Sumatra, on their last fatal journey. April 7, 1834, Rev. Samuel Munson and Rev. Henry Lyman embarked at Batavia, in the Dutch barque "Diedericka," for Padang. Their course lay round the western end of Java, through the Straits of Sunda, and along the southwestern shore of Sumatra, as far as Tappanooly Bay. We read in the journal of Mr. Lyman, the day he sailed, these words: "I thought I could say with all my heart, if I must be sacrificed to the untamed passions of cruel men, 'Even so, Father, for so it seemed good in thy sight.' He who could stay the flames of the fiery furnace can now do the same, so 'I will not fear what man can do unto me.' 'If God be for me, who can be against me?'"[2]

The voyagers give occasional glimpses of the scenery as they sail along the shores of Sumatra. When they first approach the island they speak of its beauty.

[1] *Missionary Herald*, 1838, pp. 364–372, 401–408.

[2] There are two published records of this voyage: one in the *Memoir of Munson and Lyman*, by Rev. W. Thompson, D. D., New York, 1839, p. 196; the other, *Henry Lyman, the Martyr of Sumatra*, New York, 1856, pp. 438; a loving tribute of sisterly affection.

A range of hills, sometimes rising abruptly from the sea, and again having a gentle slope, variegated with woods and fields, is overlooked by another behind it, rising here and there into lofty peaks. Floating along their sides, or crowning their summits, were clouds, sometimes resembling a newly-fallen bank of snow. In the morning the rays of the sun, pouring through a rift in the cloudy canopy, made the water like a sea of molten silver. Again, the coast all day was exceedingly romantic; lofty mountains, covered with woods and broken into ridges, plunged boldly into the sea. The hilly islands near the shore present many small bays and inlets, with vistas ending in a fisherman's hut, or a village in a level nook, hidden among cocoanut trees. The shore from Ayer Bangy to Pulo (island) Tamong is wild, mountainous, and deeply indented with bays. At Priaman the rolling surface of the hill north of the town is covered with green grass. The bay is made up of several small bays within a bay, all with fine headlands at their extremities, and gracefully curving inland, while behind rise loftier ranges, with Mount Ophir towering above them all. At Mene, in Pulo Nyas, Mr. Lyman writes: "Before us was the breaking surf, the white beach, and an intervale beyond, flecked with clumps of trees, fields, and huts, backed by a long range of undulating hills, divided between the wildness of nature and the improvements of man, their summits crowned with cocoanut groves and villages. The coast of the island at the southeast is much broken into bays, but the mountains are neither high nor rugged. Some of the hills are cultivated to their tops, with fine green plains at their base."

They speak of meadows of velvet softness at Bencoolen, the grass not more than three inches high, twice as fine and four times as thick as in New England, the most elastic Turkey carpet not softer or more agreeable. This is surprising in the tropics, but it prepares us to hear that the climate in many places is unhealthy. Most of the islands are low and swampy, the vegetation rank, and, of course, decaying. June 1st the wind was cold and damp, and a cloak comfortable on deck in the evening. In the isle of Nyas the days are warm, but a heavy dew falls at night. The hills, however, are healthy, and these constitute most of the surface, varying from five hundred to perhaps fifteen hundred feet in height. In one place they walked for a mile through grass higher than their heads, and then through thick forests. The shores are lined with cocoanut trees, and the sites of the villages are marked by the banyan trees that shelter their boats. Palm trees flourish, and the marshes along the shore are covered with mangrove trees, that seem to grow out of the water. The cotton tree is common, and a coarse cloth is made from it. The soil is a light sand, with a black mould formed of decomposed vegetable matter.

They found much coral along the shore. Sometimes the bottom of the sea seemed covered with a fleecy cloud; again it was white, mottled with dark spots. Here were snow-drifts, there trees and shrubbery, and again pillars, globes, and vases; a rich and varied furnishing. Every year these coral banks narrow the limits of navigation, forming new reefs and islands or uniting old ones.

Bencoolen lies on a point of land at the outer entrance to Pulo Bay. The northern portion of it is on high land, but a sand bank and coral reefs compel

large vessels to anchor seven miles off. It has about five thousand inhabitants, of whom five hundred are Chinese and a few Europeans; the rest Malays, with some Bugis and Nyas. It was founded by the English in 1685, and exchanged for Malacca in 1824. Fort Marlborough is a noble monument of English skill and enterprise. The houses are built of bamboo, with floors and verandas of the same, and stand on posts five feet high. The wheels of their buffalo carts[1] are solid, about three feet in diameter, and the body, three feet by five, rests on a frame one foot above the top of the wheels, with a roof like that of a Chinese house, higher in front than behind, and covered with mats. There is a small door in front.

Padang occupies a beautiful situation on the river of that name, one hundred yards wide. On the land side it is hedged in by mountains from two thousand to four thousand feet high. It enjoys a fine sea breeze, and is comparatively healthy. Ships anchor under the lee of Pulo Pesang. On the plain of Padang are about forty thousand Malays, two thousand soldiers, two thousand slaves, seven hundred Chinese, and five hundred free Nyas. The goldsmiths produce excellent work with very few and simple tools. The city is embowered in cocoanut trees. Its business is carried on chiefly by four hundred Europeans and the Chinese. The great export is coffee. The Malay bazar extends along both sides of a street for a mile and a half. Houses are mostly built of wood, on account of frequent earthquakes, one of which, not long before, dried up the river for a time, and then stocked it with fish of an unknown species.

From Padang the missionaries took a Malay prahu, of eight tons burden, with one mast and a crew of seven Malays. The hold was filled with stores, the crew, and three other passengers, and six feet of it was divided off by mats for the missionaries, where they sat or slept, but could not stand upright or have a table. The crew were indolent, dilatory, and undisciplined.

They came next to Pulo Batu,[2] a group of one hundred and twenty islets, taking this name from a singularly shaped rock. The largest of them is called Tanah Massa. Nineteen of them have a population of about eight thousand in all. The chief place of trade is Telo, at the head of a fine bay on the east side of Si Boehari, three days from Padang, and half way between Natal and Ayer Bangy. It has six hundred Nyas, one hundred and fifty Malays, and thirty Chinese. The population was reduced one half by small-pox a few years before. The people pay no tax, and use sago instead of rice. The dress of the men is a strip of cloth three inches wide, passing between the legs and wound a few turns round the body, and, sometimes, several strips of different colors, with loose ends hanging down in front. The women are more modestly attired, with the sarong fastened round the waist and hanging down to the knees. In the street a loose cloth is thrown over the shoulders. On coming of age, the teeth of both sexes are cut down close to the gums and stained black. The villages here are surrounded by a stone wall like that of a New England field. Opposite the entrance is the ametjoer's[3] house. The other three sides are occupied by wooden houses, all fronting toward the center, where an idol of wood stands under a bamboo shed. The houses rest on posts seven

[1] Padatis. [2] Rock island. [3] Head man's.

feet high. The roof is thatched at a very steep angle, and in the center of it is a scuttle for light and air. The floors and doors display much skill. Several families occupy one house, and there is an outside door to only one in two or three ; the others are connected by doors in the partitions.

They witnessed a wedding in one of these villages. But first let us look in on a Malay wedding in Batavia. There all the friends of both families are invited, and to one is assigned the furnishing of the flowers, to another the pastry, and so on throughout the list of articles required for the feast. The preparation goes on at the bride's house three or four days, with music sometimes all night long. After a prescribed round of visiting, occupying several weeks, comes the wedding procession, led by two wicker-work images of a man with black face and tiger-like teeth, with a drawn kris in his hand, and a woman of the same color and construction, with a baby in her arms. These are eight feet in height and very broad, a man inside of each furnishing the moving power. Next follows a band of native music, and then the presents, which are mostly artificial flowers, and paper cut into fanciful shapes. The friends of the bridegroom follow on horseback ; next the bridegroom himself, also mounted, loaded with jewels, and fanned by a friend. Others on horseback, and a crowd of men and boys close the procession. Arrived at the house of the bride, gongs, cymbals, drums, fifes, and all kinds of music almost drown the cheers of the crowd. There the pair are seated on a bamboo platform, nearly stifled by the quantity of fancifully cut paper around them, and scarcely able to hold up their heads for the weight of jewelry. The guests care more for the loaded tables under temporary bamboo sheds outside than for this display in-doors. A New England Thanksgiving dinner is nothing compared to the variety and quantity of the food provided. The provincial wedding was somewhat different.

In Pulo Batu they found one thousand guests assembled at the marriage of the daughter of an ametjoer. Near the shrine of the idol, in the center of the village, was a high pole, from whose top floated two streamers : one of scarlet, for the bridegroom, and another of yellow, for the bride. On either side were four other poles and streamers of different colors. One hundred and fifty dancers moved with measured step around the center pole, each sex by itself, and all ranged according to age. The music, such as it was — for the Nyas are not given much to that art — was entirely vocal, a half-shouting, half-singing. Then half drew off, and half closed round the bride and her companions. Meanwhile, others at one end of the enclosure were slaughtering a score of hogs, and boiling meat, intestines, and all, in thirty huge caldrons. The pork that could not be got into the kettles was divided among the seven villages that furnished the animals ; and after the distribution of the presents — one shabbily dressed old man giving gold ornaments worth $200 — all sat down to the feast of pork and rice, and a part was brought to their American guests, who performed their part as well as they could. Many of the women were stylishly dressed. The hair was fastened in a knot behind with gold ornaments. A band of gold passed round the forehead. They wore long golden ear-rings. A scarlet petticoat was fastened round the waist ; a long piece of calico was wound round the bust, and over it a *berthe* of yellow beads, terminating below

in a fringe of little bells and shells. By way of girdle was a quantity of brass wire chain. Then there were necklaces, bracelets, and rings of gold and ivory, and below all, their bare feet.

The Nyas are fairer than the Malays, and their type of features superior to the rest of the natives, yet they are said to be very treacherous. Under pretense of looking at it, they shoot a man with his own gun, and, professing to lead him to a fine hunt, they decoy him into an ambuscade. They are neat in their persons, and in each village is a bathing place for the women, walled in with stone.

When one dies he is put in a coffin, and the family make a feast as at a birth. The coffin is laid on a platform in the thickest and loneliest part of the woods. The head is always laid in a plate, and the mat, clothes, and pillow of the deceased, with another plate, are fastened to a stake near by, to decay with their owner. In the northern part of Pulo Nyas the dead are buried. When a month old, the right ear of every boy is slit, and both ears of every girl, and a name is given to the child. Women are treated with a great deal of respect, and associate with the men. There is more regard shown to the wife and mother than among other natives of the Archipelago. Monogamy, of course, prevails, for such a state of things never co-exists with polygamy. On the death of a wife the husband may marry again after a few days, but a widow must wait as many months. No wife can be divorced whose character is good; when one is divorced, the husband must pay her $20. Children are punished by their parents for lying, and when older liars refuse to confess and show penitence, they are fined $20. The thief who does not confess and restore the stolen property is bound hand and foot and thrown into the sea. Adulterers and murderers are beheaded; but these crimes are so rare that some do not remember the occurrence of one of them. In the island of Nyas, the crime of stealing plantains is fined $50; stealing goats more than that; and stealing rice or gold involves death; so do adultery, murder, and fornication. In the latter case, both man and woman are put to death. Debts unpaid are doubled after one year, and doubled again after the second year, and the same is done with any portion that remains unpaid. After three years, by paying a bribe to the rajah, the creditor can generally get leave to sell the debtor and his family into slavery. So, if a man is proved to have poisoned another, he and his family are sold as slaves. The Dutch call these debtors, but they are slaves. They are brought to the shore bound, and during the sale are tied to a post; then, with only a strip of bark about their loins, are fettered and fastened on board the vessel, to prevent their committing suicide. The government buys them for a term of years, giving them their food, clothing, and $1.20 per month, but none are ever known to be liberated or to return to their native land. Where slavery exists, it opens the door to all villainy. The missionaries saw two interesting orphans, a boy and a girl, who had been sold by their uncle, so that he might increase his own property by their price. In the southeast districts of Pulo Nyas, whither the missionaries went next, men sometimes sell their neighbors, and a few dollars paid to the rajah keeps all quiet. Sometimes parents sell their own children, and children their parents. A man has

been known to sell the children of his first wife to obtain the price of a second. Some say two hundred slaves are taken annually from the island, and others say a thousand from Simambawa alone. The government had a large prahu on the coast when the missionaries were there, with orders to get two hundred in six months. They pay $20 per head, and a premium of $4 more. Two years before, a French ship had taken four hundred to the Isle of France. We are not surprised to hear that in this island one may have as many wives as he can support. The price of one differs with the rank and wealth of her family.

There is only one good harbor on the island, and the population is about two hundred thousand. One village they found with eight thousand inhabitants, and another with six thousand. The village of Mene is palisaded by sharpened bamboo poles, and entered through gates at each end of a fortified passage twenty feet in length. There are five dialects spoken in Nyas, the court language being more soft and smooth than the others, but scarcely understood by the common people. Their farming tools are very simple. The men are well formed and manly, with fine foreheads, but no beards. Their hair is black and straight. The women are short, thick, and awkward in their movements, and neither so neat nor so intelligent as those of Pulo Batu.

In the southern part of Nyas the villages are fortified, the houses oval or round, but small and badly built. The people have more enterprise and independence, but not the gentleness of the Batu people. The island is divided into districts. Each village has a chief, and over the whole district is a head chief. In the middle and northern districts, justice is administered by a council of chiefs. The greatness of a man is measured by the number of heads he possesses, and the more civilized the race that furnishes the head, the higher the rank of its possessor. The heads hang in a wicker frame conspicuously in the house. Their weapons are a home-made spear and two krises, also of home manufacture, one longer than the other; the smaller one is in constant use for all manner of purposes. Their defensive armor is a light, oblong wooden shield, a wooden breastplate, a jacket[1] reaching to the hips, or several of them worn one over the other, made either of cotton or the bark of trees. The jacket and shield are worth less than a dollar, and the spear and daggers are valued sometimes at $4 each. In the use of their weapons they are very expert, dodging with great agility, and, after throwing the spear, rushing to close quarters with the kris.

From Nyas the missionaries crossed over to Tappanooly Bay, where the captain of the "Diedericka" was once invited by a chief to feast on a boy seven years old. Thirteen years before, the boy's father had killed the chief's brother. The boy, recently arrived in the place, had innocently told who he was, and was at once killed and eaten for the sin committed six years before he was born. Among such a people the missionaries now went, leaving their vessel, and traveling on foot through dense thickets and up and down steep rocks, only to meet the fate of that little boy, on the fifth day of their journey, June 28, 1834, at the village of Sacca. We have a brief account of the scene from one of their surviving attendants, and also learn that when the Battas

[1] Badjoe.

came to know what was done, they leagued together, and, in an hour when they looked not for it, burned up the offending village and slaughtered its inhabitants. Far different were the feelings of the mother of the martyred Lyman. Though even twenty years after, when that scene was alluded to, a sleepless night and pallid face told how the mother suffered, yet when the sad news was told her by Dr. Humphrey, then president of Amherst College, the first words that she uttered after she was able to speak were: "I bless God, who gave me such a son to go to the heathen, and I never desired so much as now that some other of my children might go and preach the Gospel to those who have killed my Henry." Such an utterance speaks more for the missionary work than all the scientific results it ever yielded. Through the kind exertions of the military commandant at Tappanooly, their heads were not left to hang in the bamboo huts of their murderers, but were reverently returned to their native land.

This martyrdom also furnishes a contribution to psychology which claims a passing notice. Mrs. Lyman was remarkable for the uniformity of her cheerfulness, and her constant looking on the bright side of things; but on June 28, 1834, she felt unaccountably oppressed. A heavy burden pressed her down all day long. She could not engage in her usual occupations. Again and again she said, as she sank into a chair: "I cannot throw off this depression. Why should it come to-day?" Next day she heard that a favorite nephew had died on the 27th, and she said: "Strange that I should have felt so the day after." Months passed, and when she came to enter Henry's death opposite the date in her *Daily Food*, to her surprise, she found that it was the day of her strange depression. Such facts suggest deep thoughts of the connection of the present with the future life, and the connection of God with both.

BORNEO.

A few facts respecting the island of Borneo and its inhabitants are here condensed from the pages of the *Missionary Herald*, 1836, pp. 433–439.

If we call Australia a continent, Borneo is the largest island in the world. It contains over three hundred thousand square miles of surface. The coast is indented by many bays. The rivers Borneo, Banjar, Sukadana, and Pontianak are navigable for more than fifty miles. Near the coast the land is often marshy, but inland there is great diversity of surface, and most beautiful scenery. A high range of mountains runs from northeast to southwest through the island, with a branch turning off to its southeast corner. The island was discovered by the companions of Magellan, in 1521. The Portuguese attempted a settlement in 1625, but were driven off. The Dutch erected a factory at Pontianak in 1643, and have maintained their hold ever since. The English sought to secure a position at Banjar Masin in 1706, and again at Pasir in 1772, but failed in both cases. Borneo proper is a district on the northwest coast, seven hundred miles long, with a breadth varying from one hundred to one hundred and fifty inland. The city of Borneo, or Bruni, stands on the river of that name, ten miles from its mouth, built on posts within high-water mark. The palace of the sultan alone is on dry land. Its inhabitants are mostly Malays, and of uncertain numbers; some say about twenty thou-

sand. The district of Sambas, to the west of this, has been notorious for piracy; nor is it alone in this. The southeastern part of the island, near Pulo Laut, also swarmed with pirates, who banded together a number of prahus, and lay hid among the small islets, ready to pounce on any native vessel that might come within their reach. They were not so ready to attack European vessels, though that also has been done, sometimes with success.

The Malays furnish the pirates, as they live on the coast, and they also oppress the native tribes in the interior in a merciless manner. Crimes, too, go unpunished, unless where personal interest secures the repression of evil-doers. It needs no argument to show how such a state of things subverts moral principle, and keeps the people in continual unrest, if not in hopeless anarchy. There are some Malays, however, who do not fall in with the prevailing violence, else society could not be held together. The Chinese live chiefly in the northwestern part of the island. They are peaceful, industrious, frugal, and given to trade. They have been in Borneo for a century, but have not forgotten their home training, and make good citizens. Most of them live under a government of their own, which punishes crime with great severity. Others live under the Malays or the Dutch. Many of them are agriculturists, and in some places they dig for gold and diamonds. They number probably between two hundred thousand and three hundred thousand.

The Bugis engage mostly in trade and maritime pursuits, and compete in these with the Chinese. They are described as treacherous and hostile to Europeans, and, when they can, seek to get political power out of the hands of the Malays. They number about twenty-five thousand. In religion they are Moslems, like the Malays, but are in advance of them in many things, and among those on the coast some are wealthy.

A few inoffensive and industrious Javanese live on the southern coast, but the mass of the interior population is Dyak, or Dayak. These are broken up into a number of petty tribes, having different languages, and frequently at war with each other. Seven dialects are spoken in the northwestern part of the island. They have very crude and indefinite ideas of religion. In person they are fairer and more manly than the Malays, but the women, as among the Patagonians, are not so well formed as the men. Polygamy is almost unknown among them, and in social intercourse they are kind and hospitable, though the missionaries found villages which formed an exception in this respect. While at one place, the people wanted to carry them on their backs through the jungle to their village; in another, a young man would not bring even a drink of water, but set it down several feet off; and all their intercourse partook of that surly character.

The Dyaks love the high lands, and are sure to be found there, and along the banks of the streams among the hills, where the water is cool and clear, unlike the swampy mangrove region along the shore. Some of the tribes are in the lowest barbarism, and know neither marriage nor dwellings, but rove like wild beasts, and at night sleep under a tree, with a fire to keep off beasts of prey. They are hunted like game by the other tribes, who kill the men but spare the young women. The children, however kindly treated, cannot be

tamed, but flee to the woods at the first opportunity; so that their feet are sometimes cut off to retain their services in paddling canoes. The Dyaks generally cultivate the soil, but in a very bungling way. They cut down the forests, raise one or two crops from the virgin soil, and then leave it, either to grow up in lalang — a kind of wild grass — or to be cultivated by the industrious Chinese, while they move elsewhere, to repeat the same process, never staying more than six years in a place. At first their numbers were estimated at one million in Borneo proper, and two millions in the whole island; but more intimate acquaintance with them has led to greatly reduced estimates. The largest known village does not contain more than four hundred and fifty souls, and their constant wars, and especially their habit of cutting off each other's heads to serve as household ornaments, in some places threaten their extinction. The missionaries tell of one expedition for heads that was attacked by a Dutch vessel, which they incautiously approached, and three hundred Dyaks were either killed outright or sank with their boats, which were broken into fragments by the cannon balls. Wherever the missionaries went they had to sit under these hideous trophies in the Dyak houses, sometimes as many as twelve or twenty adorning a single dwelling. The skin is removed, the skull is polished, and figures carved on it, while a bunch of rattan leaves is attached on either side. A man's standing is measured by the number of heads in his house; and though it is not true, as a general rule, that a man cannot marry till he has cut off a head, yet sometimes this is the kind of dowry demanded. New heads are more valued than old, and those of women more than those of men. They are prized as charms that avert evil from the house where they are, and so their owners will on no account sell them. Like the vendetta or blood revenge of some countries, this never ends; for, although the latest head may have been cut off in revenge for a previous murder, it creates a demand for retaliation, just as though it were the first in the series. When a head is obtained, the whole village comes together to give expression to its joy. The head is boiled till the flesh comes off, the scalp is buried with a rough wooden image of the victim, and men, women, and children all feast together on swine's flesh, with music and dancing. The place for such orgies is generally under some trees, enclosed by a fence, with a platform and a bamboo pole in the centre, with a basket at the top, for offerings of fruit presented to the heads. It might seem as though the people who do such things must be exceptionally ferocious; but this is by no means the case. They are not savage, but mild; and in many places the custom is abandoned as they see how it is regarded by more civilized people, and no doubt it would quickly disappear before the Gospel.

One tribe, the Jangkang, are cannibals, and so is another on the eastern coast. They boast of it, and claim that it makes them brave. "How could we be so," they say, "if we never tasted of human flesh?" They do not eat the whole body, but pick out as tit-bits the tongue, the brain, and the flesh of the legs. The men of this tribe file their teeth to a point, like the teeth of a saw. They are unusually well-proportioned and muscular. They go nearly naked, wearing only a narrow strip of cloth or bark about the loins.[1] On the right

[1] Chowat.

side they carry a small ornamented rattan basket,[1] holding the apparatus[2] of the chewer of betel-nut; also a sheathed knife[3] with long, slender blade, used for ordinary purposes and trimming off the ears of heads. On the left side hangs the heavy sword[4] that can cut through both arm and neck at a single stroke. The dress of the Dyaks is similar. Their hair is black, and, worn long down to their shoulders, gives them a wild look. Some wear a string of cowries round their heads. The women wear a cloth extending from the loins nearly to the knees, and a cap of rattan. Their ears are usually pierced with a piece of bamboo nearly an inch in thickness. In southeastern Borneo the lobe is stretched so much in this way, over wooden rings as large as a dollar, that it sometimes breaks. Quantities of beads adorn their necks. Many rings are on their arms, mostly of brass, but some of jade-stone. A girdle made of rings of rattan dyed red and black is fastened over the waist-cloth by a clasp; some wear one six or eight inches wide, adorned with many-colored beads. Their bust and arms are naked, unless when a loose cloth is sometimes thrown over them. Boys are naked, and girls wear a strip of cloth like the men. The bark cloth they use is sometimes printed in colors by rude blocks.

The Dyaks have no alphabet, but they have a sign-language by which they communicate a summons to battle, like the red cross of the Highlanders. For this they use small wooden weapons such as they use in their blow-guns.[5] The two opposite points represent the two armies, and the number of notches between, the number of days before the battle. A larger arrow has as many notches as the number of men demanded from the village. Sometimes one end is burned and the other painted red; this means that the village of the enemy is to be burned, and the people slain. They have a similar sign-language for peace. Near the path, where the countries of two tribes joined, the missionaries once found a water-jar and spear, and were told that one tribe had placed them there as a token of desire for peace, and as long as they were left there by both parties, peace would continue. But what if some malicious person should remove them, or wild beasts displace them? In counting, instead of advancing from ten to twenty, and so on, as we do, they stop at ten as we do at a hundred, and then say so many tens.

The Dyaks are not given to stealing; articles could be trusted to their care with safety, though they do not shrink from begging for what they want. They are treated with great severity by their Malay rulers, who take most of the harvest for taxes, and do not leave enough to feed them till another harvest. The missionaries found the people in Karangan living on roots long before their crops were fit to eat, and when they ripened the tax-gatherer took the greater portion. So the people lose all incentive to labor, and this state of things between them and their rulers is a serious hindrance to missionary effort. Their houses are built on posts, in one continuous range, and divided by partitions according to the number of families, each with a front door. In front of the whole is a veranda about ten feet wide, on which they dry and thresh their rice. One door in the outer side of this veranda answers for several houses;

[1] Tung king. [2] Sirih. [3] Sinda.
[4] Lansa. [5] Sumpitans.

and a log with notches cut in it, or two poles tied together with rattan, serves for a ladder from the ground outside. The roof is thatch,[1] and the sides enclosed with bark.[2] The space under the bamboo floor serves for a hog-pen, so that the houses are not very savory to Europeans. In southwestern Borneo large earthern jars stand in rows round the room, and indicate the wealth of the owner. The windows are in the roof, and, as they are open, serve for both window and chimney. Their roads are mere trails, sometimes hardly discernible, and lead through jungle, up and down rocks, and now and then through swamps with water all the way from the knees to the shoulders. Sometimes the missionaries had to stand in such a cold bath till some sort of a bridge could be arranged across a place that was over the head. Their streams are very rarely bridged; though a bridge is described at Majan, made of poles and withes, in the form of an arch, about seventeen feet high in the middle, fastened to a tree at one end and stakes at the other, with long vines fastening the railing to the limbs of trees.

Pontianak is described at the confluence of the Landak and Kapwas, fourteen miles from the sea, and directly under the equator. The river is navigable for vessels of four hundred tons, but a bar at its mouth causes difficulty to those over half that size. The population within a radius of six miles is six thousand Malays, two thousand five hundred Bugis, and two thousand Chinese. There are no Dyaks in the place. There is an unusual sound like the music of an Æolian harp, caused by the motion of boats on this river in the dry season, dependent on some peculiar connection of the state of the atmosphere or the height of the water with the conformation of the shore. The Ladak river is so narrow in places that the missionaries had to chop through trunks of trees lying across it, before their boats could go on.

The Dyaks have a custom which they call sabat, in which a little blood is taken from the shoulders of the high contracting parties, and, after being mixed with water, is drank by them as a pledge of brotherhood. This gives a stranger the freedom of the country. When a child is born, the father lies idle for a month, under the belief that, if he does not do so, the child will die. They believe the rainbow is the reflection from the crest of a huge serpent, of a species called nabo, in training for a conflict with the sea-serpent[3] that lives in a whirlpool in the center of the ocean, whom he will attack when he deems himself ready for the battle.

The Dyaks wrap their dead in a white winding-sheet, and place them in a rough coffin. After the grave is dug to the proper depth, they excavate a chamber at the side just large enough to hold the coffin, and, slipping it in, fill up the grave. They make a great wailing, and none in the village are allowed to work for three days after.

They have great faith in omens. They will not attack the enemy till birds are heard on their right; if on the left, it is a bad omen. So they delay sometimes for a month after an attack is resolved on. If the cry is on both sides at once, success is doubtful; but if that on the right is the stronger, they expect success with difficulty. If a bird swoops down flying over a sick man, he will

[1] Atap. [2] Kajang. [3] Naga.

die; if it flies upward, he will recover. When a bird flies into a house, they think an enemy is coming, and if certain birds are heard in the night, they rise and go out, fearing an attack. Some of the tribes on the Kapwas believe in transmigration. After death they expect, like their ancestors, to become deer and orang-outangs; hence they never eat the flesh of the deer.

A map of western Borneo, prepared by the missionaries, may be found in the *Missionary Herald* for 1844, p. 314. Further west, Dr. D. B. Bradley, whose medical skill enabled him to go everywhere, explored many portions of Siam, and described intelligently what he saw. So also did Rev. S. Johnson.

INDIA.

Hindostan, now traversed by railroads for thousands of miles, has become a well-known land. Missionaries penetrate all parts of it, and their journals bring the information obtained at once before the reading public. In 1851 our own missionaries traveled more than six thousand miles. In 1864 Rev. G. T. Washburn visited fifty villages in an adjoining district, and more than two hundred in his own, in order to map out his work intelligently. Obviously, he could not help obtaining much geographical knowledge, and so with other missionaries in other fields. Missionaries are instructed to explore regions imperfectly known, in order to obtain the geographical knowledge essential to the wise prosecution of their work.

The name India is derived from the river Indus, and was given to that country by the Persians, and so passed over to the Greeks. The Sanskrit name of the country is Bharat, sometimes called Bharat Khund or Jambhudvipa. The name Hindostan, from Hindu, *black*, and stan, *country*, was also given by the Persians, but comprises properly only the region north of the Nerbudda, west of Bengal, and east of Gujerat. The extreme length of India is more than nineteen hundred miles, and its breadth from the mouth of the Indus to the Brahmaputra exceeds fifteen hundred. Its area is one million two hundred and eighty thousand miles; larger than that of the United States east of the Mississippi, and as large as all Europe south of Russia and the Baltic. The names of its provinces have differed at different times. Their limits are also indefinite, though they have not changed since the English occupation of the country. More than half of India is within the tropics. Nine tenths of it is further south than New Orleans, and its northern limit is in the latitude of South Carolina. Of course the climate is hot, but along the coast the heat is moderated by the sea breezes, though south of Calcutta ice or frost is seldom seen. With few exceptions, the houses have no chimneys or conveniences for making a fire at any season. In the great plains of the Ganges and Indus the heat is very intense. In the north, snow and ice are frequent in winter.

Cape Comorin is the southern termination of the Ghauts, called by the natives the Syadree mountains. They extend north nearly a thousand miles, at an average distance of forty miles from the coast. They vary in height from two thousand to four thousand feet, and at a few points are nearly five thousand. They rise abruptly on the west, but slope gradually on the eastern side, and are generally wooded. The Neilgherry hills lie east of these, between latitude

10° and 11°, separating Mysore from Travancore. These rise to the height of seven thousand feet, and are much resorted to by Europeans as a sanitarium. Their climate is delightfully cool and bracing, and knows little variation during the year.

The river Nerbudda, seven or eight hundred miles long, separates the Deckan from Hindostan. South of it lies the Sautpura range, and north of it the Vindhya. The Himálaya separate India from Thibet, extending more than one thousand miles, from the Brahmaputra to the Indus. As is well known, they are the highest summits on the globe, Dhawalgiri being twenty-seven thousand four hundred and sixty-two feet, and Chimborazo, the highest of the Andes, being only twenty-one thousand four hundred and sixty-four.[1] Among these mountains is every variety of climate, from the torrid to the frigid zone. Their scenery, the views of the immense plains below, the towering peaks above, and the endlessly varied heights and valleys, are the admiration of all who have been so favored as to see them. Bishop Heber speaks of range behind range, each more rugged and bare than the last, terminating in a vast battlement of ice, shooting up white, glittering spears from east to west as far as the eye could follow; and Raper says: "From the edge of the scarp the eye took in seven or eight distinct ranges, till the view was terminated by the highest of all. The depth of the valley below, the progressive elevation of the intermediate hills, and the majestic splendor of the Himálaya formed a picture that inspired awe more than pleasure." Elphinstone also speaks of their stupendous height, and the awful, undisturbed solitude of their eternal snows filling the mind with feelings which words cannot express.

Simla, seven thousand three hundred feet high, on the southwest slope of the Himálaya, Darjeeling in the Sikkim territory, seven thousand four hundred feet high, Abu in Gujerat, Kandalla and Mahabuleshwur, on the Ghauts, east of Bombay, Ootacummund, six thousand five hundred feet high, Khottagherry, and other places on the Neilgherry and Pulney hills, are resorted to as health stations.

Bengal, in some places along the Ganges, is perfectly level for hundreds of miles. The country, to one going up the river, seems one boundless prairie. The same is true of the lower Indus, and between that and Ajmere is a sandy desert for several hundred miles. Very little rain falls there, and the adjoining districts suffer much from drought. Gujerat is generally level and fertile, and so are some parts of the Deckan.

The Indus rises in Thibet, north of the Himálaya, runs northwest for several hundred miles, and then, turning southwest, receives the Sutlej and Beas (which together form the Ghara), the Ravee, the Chenab, and the Jhelum, and empties into the Indian Ocean, after a course of seventeen hundred miles. The Ganges rises on the south side of the Himálaya, and flows sixteen hundred miles through the most populous parts of India, into the Bay of Bengal. It is not needful to mention its sacredness or its sacred places. It bears on its

[1] Since then Kanchinjanga — as A. Wilson spells it — has taken the lead, at the height of twenty-eight thousand one hundred and fifty, and then Gaurisankar claimed the crown, though its exact height has not been ascertained. Now Mount Everest reigns supreme at a height of 29,000 feet. The next news, however, may be that a new claimant has pushed that also from the throne.

bosom a large commerce, though sudden changes in the channel often make navigation dangerous. The Godavery, Krishna, or Kistna, the Pennaur, and the Cauvery, of which the Coleroon is the largest mouth, all flow across the peninsula into the Bay of Bengal, but the great contrast between the rapid current of the rainy season, and the low water of the dry, renders them unfit for navigation. Their waters, however, carry life to the extensive region through which they flow, by furnishing the means of irrigation.

These few hints on the geography of India are from the pages of Dr. Allen's work on India, which is highly commended both in the *New Englander*[1] and in the *London Athenæum*.

Rev. F. DeW. Ward also devotes twenty-six pages of his *India and the Hindoos* to the geography of the country. In these he describes the falls of the river Shirawaty, or Carawooty, that rises in the western Ghauts and falls into the ocean near Bombay. The stream is a quarter of a mile across, but, as the edge of the falls is elliptical, its sweep is much wider.[2] The water rushes for about three hundred feet at an angle of 45°, in a sheet of white foam, and then plunges down eight hundred and fifty more, with a noise like thunder, thus quadrupling the height of Niagara. He also describes that of Courtallum, a hundred miles north of Cape Comorin.[3] He mentions hot springs near the source of the Jumna, ten thousand feet above the sea, at a temperature of 170° and even 194°; also in the Godavery, the valley of the Nerbudda, in Gondwana, Bundelcund, a village near Pooree, Setacuno, and a village near Delhi.[4] He also gives a brief description of many of the cities of India.[5]

The population of India was probably as large two thousand years ago as it is now. Previous to the annexation of Scinde and the Punjaub it was estimated — for no census of the whole has ever been taken — from one hundred and thirty-one million seven hundred and fifty thousand[6] to one hundred and forty million.[7] Since the annexation of those countries, it was assumed to be one hundred and fifty million in the debates about renewing the charter of the East India Company. Later accounts give it an area of one million four hundred and twenty-seven thousand five hundred and forty-seven square miles, and a population of one hundred and seventy million eight hundred and thirteen thousand six hundred and sixty-eight; but what the latest number is, in these days of war and doubtful annexations, would be hard to say.

[1] February, 1857.

[2] The writer sees no place for so large a river near Bombay. In Black's Atlas, edition of 1876, the Saraswati empties into the Runn of Cutch, but is quite a small river.

[3] pp. 8–9.

[4] p. 10.

[5] pp. 20–26.

[6] McCulloch.

[7] Elphinstone.

III.

GEOGRAPHY CONTINUED.

WESTERN ASIA AND AFRICA.

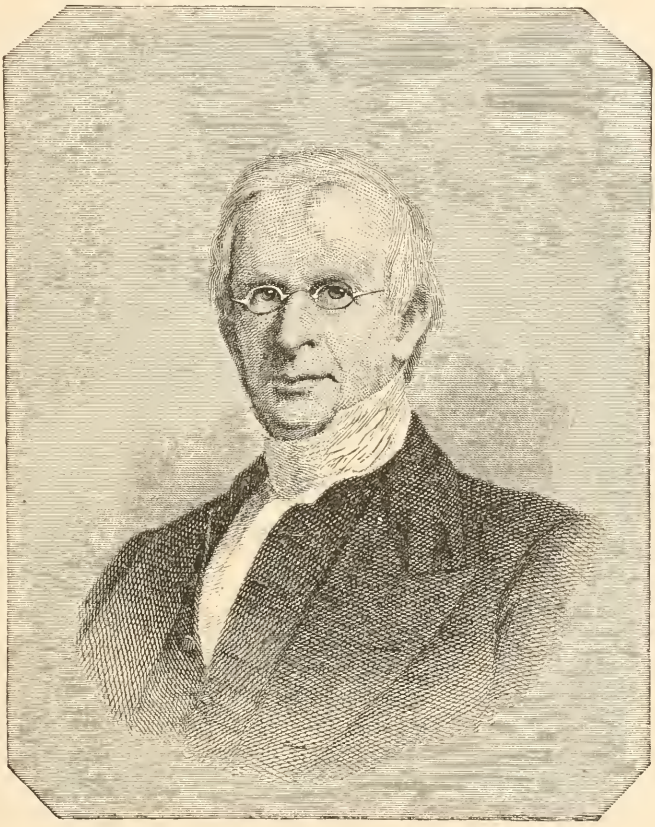
It would seem as though this ancient region needed no new exploration, but there is hardly any part of the world where missionaries have done more for the science of geography. In January, 1820, Messrs. Fisk and Parsons arrived at Smyrna, and as that port was the first visited at the commencement of our missions in Turkey, and has since been the landing-place of all our missionaries, whether intending to labor in Turkey, Syria, or Persia, it seemed fitting that the first glimpse of the Orient to so many should form the frontispiece of a volume designed to record their contributions to science, itself one of their gifts to the science of geography, for it first appeared in the *Missionary Herald*, July, 1872. The view is reproduced from a photograph taken from a point somewhat to the south of the usual anchorage, and was very familiar to the writer during his quarantine on returning from Syria.

Beginning at the right, the solitary cypress tree below the castle is the traditional site of the martyrdom of Polycarp, a personal friend and disciple of the apostle John, and the pastor of the church in Smyrna. The houses of the city fill the center of the engraving, the Turkish barracks forming a large parallelogram open to the bay. Beyond this appear the shipping and the mountains toward Manisa. This is one of the best harbors in Turkey, and is connected with the interior by two railroads, one running eighty miles southeast to Aidin, and another sixty miles northeast to Casaba. The population of the city is one hundred and eighty thousand; made up of Turks eighty thousand, Greeks forty thousand, foreigners thirty thousand, Armenians seventeen thousand, and Jews thirteen thousand. Its exports of grain, cotton, fruit, madder, opium, wool, and valonia amount annually to $18,000,000, and the imports to $14,000,000. Greek is the language of commerce, and the Greek element predominates in society.[1]

In the same year that Revs. P. Fisk and L. Parsons landed at Smyrna, they made a tour among the seven churches of Asia, copying inscriptions and recording facts which were new and startling then, though more familiar now. Pergamos, Thyatira, Sardis, and Philadelphia were visited in November, and Mr. Fisk went to Ephesus in April, 1821. It gives some idea of the difficulties of travel in that day, that, though Mr. Parsons left Smyrna December 5, 1820,

[1] Rev. J. K. Greene, *Missionary Herald*, 1872, pp. 201–203.

he did not reach Joppa till February 10, 1821; but then he visited Rhodes and Cyprus on the way, and failed not to improve every opportunity for observation of the country and the people, as well as the openings for his work. In 1822 they went together to Egypt, where Mr. Parsons died, February 10. Next year Mr. Fisk and Rev. Jonas King went again to Egypt, ascending the Nile as far as Thebes, and both spent the summer in Mount Lebanon, intelligent observers of men and things, as well as devoted to evangelical labor. In 1824



REV. RUFUS ANDERSON, D. D.

Rev. I. Bird joined Mr. Fisk at Jerusalem, and Messrs. Fisk and King visited Damascus, Antioch, and Aleppo. In 1829 Mr. Bird visited the Barbary states, and gave an account of his journey, by sea and land, from April 9 to July 31.[1]

While he was in Africa, Revs. R. Anderson and E. Smith were in Greece, making a thorough exploration of the Peloponnesus and the islands both east and west. The results of this tour we have in a volume of three hundred and thirty-four pages, published by Dr. Anderson, in Boston, 1830.

[1] *Missionary Herald*, 1830, pp. 207–213, 242–247, 274–279, 305–309, 338–342.

It gives a very pleasant description of the scenery, productions, people, and institutions of that interesting land. It takes us through many places associated with classic antiquity, paints Arcadian landscapes, describes Corinth, the home of the Lernean Hydra, the scene of the Nemean games, with ancient Mycenæ and its gateway. Laconia and its capital, Egina and Salamis, Corfu and Ithica, modern Navarino and the temple of Apollo Epicarius, all pass before us. The country is described just as it issued from the terrible wars of the Revolution. Ibrahim Pasha had left it only the year before. Dr. Howe was even then distributing American contributions to the starving people, and one night was spent among barrels of meal from the United States. In Elis no place was undestroyed; in Achaia only one or two. Only Nauplion and a few small towns in Argolis escaped the general devastation. In Arcadia the Egyptians had ravaged every valley and hill, every village and hamlet. Fire and sword had been carried through Messenia, and in the upper province of that name half a million olive trees had been destroyed. In Laconia only the district of Mane escaped. Yet the people came out of their temporary shelters, entered with zest into the hilarity of their feasts, and looked forward to the future with bright anticipation. The book is full of interesting facts about Greek agriculture and commerce, national education and religion, churches and monasteries, the monks and the clergy; the goverment, and especially Capo d'Istrias, the President of the young republic; and, though not popular in the modern sense, is a valuable book of reference for the knowledge of Greece as she was in 1829.

In this connection we will add that Rev. Drs. H. G. O. Dwight and W. G. Schauffler added to our knowledge of Macedonia, in their account of a journey in that province, published in the *Missionary Herald* for 1836, pp. 245–249, 284–288, 333–338, 369–372, giving an account of Samothracia, Salonica, Serres, Philippi, and Adrianople. Rev. Mr. Parsons also visited Serres[1] and Bulgaria.[2] Rev. E. M. Dodd visited Berea and Larissa.[3] He gives a more extended account of this journey in the *Bibliotheca Sacra* (1854, pp. 830–836); criticizes Butler's map of the region, which makes the Astræus flow into the Lydias, and makes the Haliacmon empty into the Gulf of Salonica twenty-five miles south of its present mouth, which would involve its crossing Mount Olympus. Mr. Dodd gives a corrected map of the region in Newcomb's *Cyclopedia of Missions* (New York, 1854, p. 750). The Lydias now flows into the Axius. Rev. G. W. Leyburn also gives a view of the scenery of Laconia, and an account of Sparta (*Missionary Herald*, 1839, pp. 178–185).

No wonder a writer in the *British Quarterly* (January, 1878) says: "The missionaries in Western Asia found the soil rich, the climate delightful; the vine, the olive, the mulberry, and rich fields of grain, reminded them of nature as set forth in classic song. Interesting in itself, the external world there is more interesting from the events of which it has been the theater. There is the battle-field of Issus; there Pliny was governor of Bithynia, and Cicero wrote his beautiful letters as governor of Cilicia. It is sacred as well as classic

[1] *Missionary Herald*, 1851, pp. 258–260.
[2] *Missionary Herald*, 1852, pp. 78–82.
[3] *Missionary Herald*, 1852, pp. 235–238.

PRIEST.

PATRIARCH.

BISHOP.

ARMENIAN ECCLESIASTICS.

ground. There was the cradle of the race; there God planted the garden eastward in Eden; there Noah preached; there Abraham lived, and Isaac; there was Babylon and Nineveh; there reigned Cyrus and Nebuchadnezzar; there Isaiah and Daniel saw the visions of God; and there Esther and Mordecai, Ezra and Nehemiah did the work assigned them. Our missionaries could not help exploring such a region with the greatest interest, and we have the result in their writings."

Dr. Anderson returned to Malta September 4th, and Rev. Messrs. E. Smith and H. G. O. Dwight left there March 17, 1830, on their long journey through Asia Minor, Armenia, Georgia and Northwestern Persia, from which they did not return till July 2, 1831, having been absent fifteen months and a half. They were both accurate and intelligent observers. Mr. Smith had already had much experience in Oriental travel, and the rich results of their investigations we have in two volumes, pp. 328 and 348, published in Boston in 1833, and republished in London the following year. These volumes contain a mass of information about the countries passed through: their scenery, soil, climate, and productions; their inhabitants, their agriculture, buildings, dress, modes of life, manners and customs, the condition of woman, the modes of travel, education, religion, church polity and doctrines, ecclesiastical affairs, government, and social life. Three letters are devoted to Georgia. German colonies and German missions in that region are described. Two letters are occupied with Echmiadzin, and six with Persia; about half of these are filled with an account of the Nestorians of Persia, with all that could be learned about those in the mountains of Kûrdistan. This was the first reliable information that Christendom had about their present condition, and it awakened intense interest. The mission to the Nestorians grew out of the information obtained on this journey, and the facts it contains about the Armenians are still a standard source of information concerning that church and people.

A valuable map accompanies the volumes. There is an interesting account of the under-ground houses[1] of Armenia, formed by digging into a side-hill so as to bury three of the walls and leave only room for a door-way in front. The walls are of rough round stones, and the roof of unhewn logs, blackened by the smoke of years, with earth above, so as to restore the side-hill almost to its original shape. It contains, sometimes, only one room, occupied by both the household and the cattle, though generally there are other rooms behind, for cattle and stores. In the center of the principal room a round hole is dug for the *tandoor*,[2] three feet deep, and lined with clay. When bread is baked it is in the form of thin sheets, that are stuck on the heated inside, and drop off when baked; and for purposes of warmth, the tandoor is covered with a bed-spread, under which the feet and legs of the household utilize the heat to the utmost.

As for the need of heat in that region, our travelers, in returning as late as April 20, found the pass of Dahar so full of the winter's snow, now soft, that ravines of great depth were transformed into plains. The track led over abysses of unknown depth; every few rods a horse sank in the soft mass, beyond its own power of recovery, and had to be unloaded and lifted out. One

[1] Vol. I, p. 116.

[2] Oven.

sank into a hole so deep that only its narrowness saved him, for his feet rested on nothing. Soon the rain became snow. Their Tatar disappeared to seek deliverance for himself. The day was near its close, and yet they had not reached the highest point. The path was now hidden by the falling snow, the wind blew a hurricane, and drove the damp snow into and through their clothes, so that the weight impeded their progress; and what strength was left was exhausted in the constant loading and unloading of the animals. Once a blast struck them, so cold it chilled their very bones and induced a sense of faintness and bewilderment; but this was the summit of the pass, and their journey was easier down to the village, which they reached after spending thirteen hours in riding a distance of six,[1] and yet, though the muleteer and servant came in at nine o'clock, and the latter fell down helpless as soon as he was inside the door, their Kûrdish host only mocked his distress, and refused even a morsel of food to revive him, leaving the missionaries to restore him as best they could.

Going over this same ground, Dr. J. Perkins was able to give much more full information in his *Residence of Eight Years in Persia among the Nestorians*,[2] for his was not a journey only, but a prolonged residence. His volume abounds in rare and interesting facts, but unfortunately is not arranged topically. Everything — geography, history, archæology, natural history, personal adventure or missionary narrative — is all thrown together *en masse* under the date when the fact was ascertained or the event took place; hence one may grope in it for hours and not find the information he seeks, though it is in the book, and would be of great value could it be found. As a specimen of the work, take a brief view of some of its statements concerning the different races of that region. An expedition of the Pasha of Erzrûm against the Jellalee Kûrds compelled Dr. Perkins to leave the direct road to Tabriz, in Persia, making a detour through Georgia. It will be seen that he was only passing though Russian territory, not intending to remain in it. Moreover, the health of Mrs. Perkins was such as to make every day's delay full of peril. In such circumstances, his treatment by Russian officials, if it cannot excuse, may yet serve to explain the virulent hatred against government now rife in that empire. After their names, object, and destination were taken down, they were permitted to cross the Arpa Chai and proceed to the quarantine. There their passports were demanded, and they had one from the Russian ambassador at Constantinople. Twice after, on the same day, the same demand was repeated; every servant and muleteer was recorded, numerous questions asked, and every letter in charge for Tabriz taken possession of. Like our prisoners in Andersonville, they were quartered in a hollow on the bank of a muddy brook. The sun beat on them by day, and the stench of unburied horses close by was intolerable. Scarce a day passed without a number of floggings within a few rods of their tent, some of them mercilessly brutal. Often they had nothing to eat till afternoon, and once or twice not a morsel all day. When milk came it was sour, and eggs were often more than stale; yet their interpreter, within sound of those cruel blows, feared to utter a word of remonstrance. On the second day, their

[1] Distance is measured by hours, miles being unknown.

[2] Andover, 1843, 8vo, pp. 512.

boxes, made of extra strength in Constantinople, which had passed every Turkish custom-house unopened, were rudely split open and broken, and their contents strewed over the floor of the smoke-house, to lie there for fourteen days. A request after several days to be allowed to repack and repair, so as to save time, called forth the peremptory reply that they must lie there during the whole quarantine, then be closed, and again reopened at the custom-house. A humble petition to see the custom-house officer and explain their circumstances met the gruff response that he was too busy to see them; though they afterwards learned that he walked daily near their tent. After the tedious fortnight was over, Dr. Perkins put the boxes together as best he could, and hired a cart to take them to the custom-house. The officer received him rudely, and first demanded a list in Russian of all the books. Dr. Perkins offered one in English, but that would not do. He soon, however, abandoned that demand, as he could not understand the English titles, nor Dr. Perkins translate them. Then he attacked the medicine chest; every paper and vial was opened and smelled of, and their names taken down; a small paper of tapioca was marked for duty. At length the physician was sent for, and everything reopened. A small paper of oatmeal was pronounced magnesia, and the decision was that the books and medicines, as European goods not allowed to enter Russia, must go back to Turkey. Remonstrance was of no avail. The offer to have everything sealed, and the seals inspected on leaving the country, was met only by the reiteration: "The boxes must go back." We pass over the rude inspection of, and still ruder jokes made over, the trunks of Mrs. Perkins. Any expostulation only called forth the curt reply: "I know my own business;" and the interpreter dared not interpret, for fear of the lash. The examination was suspended at two o'clock, and no entreaty could induce the officer to resume it till just before evening. After passing by without speaking, he sent a servant to look at the rest, and then peremptorily ordered the whole back to Erzrûm, except their wearing apparel. It may be thought that money was the object, and that had Dr. Perkins offered that, he had been spared all this. Not at all. As the animals had been hired for Tabriz, and the muleteer refused to abate one para, even though they went there without their loads, and it would be very costly to hire another to carry them back, Dr. Perkins felt justified in offering a liberal sum, not to bribe injustice, but to purchase most undeniable justice, to say nothing of mercy. But all was of no avail. "Your boxes must go back," was the only answer the Russian officials gave, alike to entreaty, expostulation, or offers of money. Even so, when next day, at ten o'clock, the tent and bedding, with what clothing they were allowed to carry, was presented for inspection, he "was not ready to be seen." At one o'clock he examined them, and, after keeping Dr. Perkins waiting an hour for his passport to be returned, he sent him off without it, and detained his interpreter to carry it to him. At first the medicines were permitted to go, for the use of Mrs. Perkins, but even that permission was withdrawn. The interpreter was not allowed to leave till nine o'clock next day, after paying $5 for a certificate that the things taken with them had been examined.[1] This precious morsel of knowledge of Russian

[1] *Residence of Eight Years in Persia among the Nestorians*, pp. 123-142.

character was procured at the cost of some two months' sickness of Mrs. Perkins, who at first was unconscious of her sufferings, and was pronounced by several physicians beyond the hope of recovery.

The Kûrdish character is well described on another page,[1] where, after two hundred horses with their loads were taken from a caravan, and a number of men killed on both sides, the loads were hardly in their hands before the women had rolled several boxes of sugar into a neighboring brook, and were calling on their husbands and children to come and drink sweet water.[2] It is said of them that, if they should remember that the Koran forbids to rob a living man, they would first kill the man and then rob him.[3]

Persian politeness is graphically sketched,[4] and Persian duplicity set forth in the portrait of a Moslem servant, who, having been absent on business some days longer than was needful, was found in a Mohammedan village, passing himself off as the Emir e Nizam,[5] and making the whole village serve him accordingly; and when Dr. Perkins detected him in the act, he told the villagers that this Englishman was his friend, who had ridden forty miles in the rain to do him honor. At Erzrûm the same person was beaten by a Turkish officer, in a quarrel; but, though an entire stranger, Saudoc announced himself as the convoy of an English nobleman, and demanded satisfaction with such an air that the Pasha bastinadoed the officer at once, without inquiry.[6] Even Nestorians are not wholly uninfected by the prevailing duplicity. Moslem oppression sometimes awakens very bitter feelings in the oppressed, and some villagers who had come to condole with the family of their deceased Khan loudly lamented thus in their own language, fortunately unintelligible to their Moslem hearers: "The wicked old oppressor is dead. We rejoice. He is receiving the reward of his iniquity. May his family soon follow him."[7]

The size of Persia and its physical aspect are described,[8] and the mechanical ingenuity of the people.[9] A Persian gunsmith made a pistol so exactly resembling one shown him by an English officer, that it was only through the inversion of one of the letters in the name of the English maker that he could distinguish the imitation from the original.

He mentions a pear grown in Oroomiah, twelve inches in circumference, where fruit is very fine and abundant. Cherries ripen early in June, and, after that, apricots, plums, apples, melons, peaches, quinces, and so on, succeed each other till winter. Grapes are preserved tolerably fresh till cherries come again. All crops must be irrigated, as rain seldom falls in summer. Water is taken from the rivers where they come down from the mountains, and conveyed by canals to the plain, where a stream is taken out for each field and garden, and opened or closed with a spade, or even by the foot. The division of this water is often the source of fierce contention. Sometimes underground canals are dug from wells to distant fields, openings coming at intervals to the surface, both to facilitate the making, and then the keeping them in repair. Their agriculture, the care of their vineyards, and their custom of eating fruit *before* meals, and not after, as with us, are described.[10]

[1] Do., p. 114. [2] Av e shereen. [3] Do., p. 191. [4] Do., p. 167.
[5] Commander-in-chief of the Persian army. [6] Do., p. 264. [7] Do., p. 284.
[8] Do., pp. 144–145. [9] Do., p. 149. [10] Do., pp. 425–429.

Previous to this, Dr. A. Grant, the associate of Dr. Perkins, had published *The Nestorians, or the Lost Tribes*, New York, 1841, pp. 385, which was republished in London by Murray. This book made quite a stir at the time, and, though his identification of the Nestorians with Israel was not generally received, he held it firmly till his death. It was a source of inspiration to him as a missionary, and he collected written specimens of the language of the Jews in Assyria to fortify his position by the similarity of that to the Syriac of the Nestorians.

He was the first European to traverse the perilous regions of central Kûrdistan; Mr. Schultz, the only one who attempted it before him, having been killed by the same chief whose guest Dr. Grant became shortly after he entered the mountains. No other before him had dared to scale the lofty barriers that enclosed the mountain Nestorians. "To the borders of their country," said the energetic Pasha of Mosul, "I will be responsible for your safety; put gold on your head and fear nothing; but I warn you that I can protect you no further, for those infidels know neither pasha nor king." So his cawass[1] returned, but he went alone across the border; and as, from the rocks above him, they demanded, "Who are you?" and "What do you want?" in the harsh gutturals of the Syriac, he was startled, indeed, but not dismayed. When he replied in their own language, their jealousy was disarmed, though their fierce attitude and tone remained. His medical services also secured him favor. He had been advised to wait for an escort from the patriarch before venturing among them, but he hoped to win their confidence by showing confidence in them, and the result proved that he did not miscalculate the moral power of such courageous trust. So, at an early hour, October 18, 1839, he left the friendly house of the bishop of Duree, and, wearing native sandals, so as to stand where he could neither ride nor retain his footing in Turkish boots, he reached the summit of the mountain, and the country of the people he had so long sought lay before him. Wild precipices alternated with deep defiles, and bleak summits looked down on villages at the bottom of narrow glens, half hid among trees. Here in their "munitions of rocks" God had preserved a chosen remnant from persecution and from war. As he gazed he repeated, with a full heart, the stanza:

On the mountain top appearing,
Lo! the sacred herald stands,
Welcome news to Zion bearing,
Zion, long in hostile lands.
Mourning captive,
God himself shall loose thy bands;

and retired to a sequestered nook to pray.

Take another scene from this journey. Dr. Grant has visited the people and their patriarch, and now passes out through the territory of Nûrûlah Bey, the chief who had welcomed Schultz to his hospitality, and then sent him away with a guide charged to murder him at the first convenient place. The castle of the chief was visible long before he reached it, but, unexpectedly, he found

[1] Official guard.

him sick. He prescribed for him, and then retired to his quarters at the foot of the castle hill. Evening brought a message that his patient was worse, and wanted him at once; but he sent back word to wait till the medicine had time to produce its effect. Midnight came, and the messenger again demanded his immediate attendance. Promptly he climbs the zigzag path up to the gate. The sentinels are sounding the Kurdish watch-cry as he enters through the outer door, plated with iron. A second iron door opens into a long passage leading to the room where the chief lay sick. He was evidently impatient, and the swords, pistols, guns, and daggers round the walls gave his guest a grim welcome. He writes: "I was entirely at his mercy; but I was also in the hands of One who has the hearts of kings in his keeping. With a silent prayer, I told him he needed more powerful medicine, which would make him worse for a time. I could use palliatives, but, if he followed my counsel, he would choose the severer course." He yielded, and took an emetic, after first making some of his attendants taste it. The doctor stayed with him the rest of the night, and in the morning he was better, and was profuse in thanks. His physician must sit at his side, dip with him in the dish, and take up his abode with him permanently.

A writer in the *British Quarterly Review* for January, 1878, says: "The best description we have seen of the life and character of the Kurds is in the journals of Dr. Grant." Nor that only; but he settled some points in the geography of the region hitherto unknown. He ascertained that the Khabor rises near Julamerk, and flows within ten hours of Amadia, on its way to the Tigris, and is not the Bitlis Su, as McDonald Kinneir had asserted. While the Zab, also visible ten hours to the east, was the same as the Hakkary river of the maps. Even Colonel Chesney[1] says that the Ravandûz tributary had been mistaken for the great Zab, up to the visit of Mr. Ainsworth, in 1841, and that mistake still found a place in Black's *General Atlas*, Edinburgh, 1851; yet Dr. Grant discovered the true position of the Zab in 1839, and published his discovery both in England and America one year before Mr. Ainsworth, whose journals were not published till 1842. It is strange that Col. Chesney could make such a statement, when he refers to Dr. Grant's book on page 113 of the same volume. Dr. Grant also gave the Berdizawi in its true proportions to the Zab, but Mr. Ainsworth made it as large as that river. Both that and the Khabor should be laid down as in the map of Dr. Grant. From the top of the range behind Ashitha, Dr. Grant took the bearings of Ashitha and Sinjar southwest by south; Amadia south; the great bend of the Zab east southeast; Julamerk and Sillee northeast; Leihun north northeast; Chumba northeast by east; Jelu east by north; and Zacho west southwest. These bearings do not agree with Mr. Ainsworth's map. His distance of Amadia from Ashitha is too little by half, while from Van it is far too great. The writer, with Dr. A. Smith, in August, 1844, was thirty-four hours and three quarters going from Mosul to Ashitha — exclusive of stops — and yet, according to Mr. Ainsworth, they made only thirty-five minutes of latitude. Again: we were seven hours from a point north of Madinki and east of Kumri Kala to Ashitha, and yet

[1] *Euphrates and Tigris*, Vol. I, p. 24.

his map would make us travel only three or four miles. At Julamerk we were told that Van was three days over the mountains, and Mosul five, via Jezira; yet Ainsworth's map would rather lead one to think of going to Jezira via Mosul, so great is its inaccuracy. At Lezan is no bridge of ropes, such as Mr. Ainsworth describes, but one made of long poplar trees; so that Col. Chesney, who, on the strength of this, says that the Zab is crossed "by means of rope bridges," is led into a mistake.[1]

Speaking of bridges brings to mind one at Dizzeh, which we crossed September 1, 1844. The long poplar trees rested on rude piers on either side of the river, and bent downwards uncannily over the middle of the rushing torrent. The wicker hurdles that served for a floor were so dilapidated that our mule had to be lifted on it by main force; nor did he go far before one of his fore legs broke through, and, in struggling to get that out, the opposite hind foot followed after, so that he lay flat on the bridge. By dint of hard lifting he was got out, but the only way we could get him across was to lay down the rug on which one of us slept at night, in front of him; and after he stepped on that, the bed of the other traveler was in like manner spread before him, and so alternately, till he got safe across.

It had been intended to give some account of Turkish oppression here; but an article prepared some years ago, viewing that oppression in connection with one of the parables of our Saviour, is here given instead. It may show how new aspects of the things contained in Holy Scripture are continually suggested to the thoughtful dweller in Bible lands.

AN ORIENTAL VIEW OF THE PARABLE OF THE UNJUST STEWARD.

Commentators pronounce this parable one of the most difficult things of Scripture; not through obscurity in the terms employed, or in the grammatical structure, but because, as generally interpreted, Christ is made to hold up for imitation an act of downright dishonesty; for he sets before us the conduct of the steward as an instance where a man of this world is wiser than the children of light, and, therefore, worthy of imitation; while the common interpretation makes the change he made in the accounts of his master's debtors a dishonest act. It does not help the matter much to say that Christ would have us imitate the prudence of the act, and not its moral character, for he was not shut up to select an act wrong in itself by which to teach us prudence. This difficulty is so generally felt that all will welcome any legitimate relief.

Let us, then, inquire whether it is necessary to interpret the parable so as to give occasion for the difficulty. The common view is, that the steward took bills which had been made out correctly, and altered them so as to make them incorrect, and, therefore, unjust; but does Christ say this? Not at all. He tells us that the steward made a change in them, but does not say whether it was from wrong to right, or from right to wrong. In either case the steward was unjust, for it is unjust either purposely to make out a bill wrong at first, or to change it afterwards from what had been correct. Now, may not the injustice have been extortion in the first instance, which was rectified by the

[1] *Expedition to Euphrates*, etc., Vol. I, p. 122.

subsequent change? and in that case, is not this teaching of our Saviour relieved from all suspicion of evil? It may be said, however, that the general agreement of commentators shows that the common interpretation suggests itself most readily to the mind. No doubt it strikes us as most natural, with our Occidental modes of doing business; but would it strike an Oriental in the same way? The writer has long felt that Oriental usages point to the opposite view as the most natural interpretation, but has hesitated to bring it forward, because the man who thinks that he has found an improved mode of interpreting any passage in a book that has engaged the best intellects for centuries, is apt either to revive an old blunder or to add another to the crowded list of misapprehensions of Holy Scripture. But as a recent commentator[1] gives it as the true interpretation, the writer feels emboldened to state the facts which have led him to the same conclusion. These facts were observed a number of years ago, and some changes may have taken place since then, though things do not change so rapidly in the East as with us. They are not selected from private life — though many might have been drawn from that source — because, however strong any current of evil may be in society, there will always be found eddies where the stream seems to flow in the direction of right, the practices of a few contradicting those of the many. For this reason, it has seemed best to go into government buildings rather than into private counting-rooms for our illustrations, more especially as we know that the present system of farming the revenues in Turkey is the same that was practiced, under the Romans, by the publicans in the days of our Lord, when the parable was spoken. It is to be hoped that, bad as things were then, they were not quite so bad as at present in the interior of Turkey.

The pashas, or governors of provinces in the Turkish empire, are appointed by the central government at Constantinople. Generally they secure their appointments by purchase, and, where there are several applicants for the same office, it is sold to the highest bidder. Sometimes, however, even before the new pasha has fairly entered on his pashalic, it is sold to another, who either pays a larger bonus or promises a larger revenue; and it is easy to see how this spurs each one to reimburse himself for the purchase money in haste, lest another get his place before that is done. Such is the way in which the pasha secures his office; and so long as the stipulated payments are made at Constantinople, no inquiry is ever made into his mode of assessing or collecting taxes. The bills of the steward are never called for by his lord; he may assess what he will, and as often as he can, without any fear of being called to account. It is not surprising, then, if he adds to the amount promised to the central government, and the necessary expenses of the pashalic, as much as he thinks it safe to put in his own pocket. Sometimes, indeed, when a pasha is known to have accumulated wealth, he is thrown into prison and made to disgorge his ill-gotten gain; but that produces no relief to the tax-payer; his successor is sent, to do after the same manner, and the process goes on as before. Meanwhile, the pasha sub-lets the taxes of the several districts of his pashalic to the highest bidders, and these in their turn emulate his example in adding to their

[1] Van Oosterzee, in *Lange's Commentary on Luke*, pp. 245-246. American edition.

budgets, also; so that before the tax reaches the tax-payers, it has been greatly increased. Hence it comes that taxes in the interior of Turkey are seldom collected without the use of force; for the troops of the pashalic are at the service of the collectors, and if the money is only forthcoming, no questions are asked here, either, as to the manner of the collection.

It is a satisfaction to think that this particular field of observation was one of exceptional severity, so that the whole country may not have suffered to the same extent. Nevertheless, as the facts there observed strikingly illustrate this view of the parable, they are stated just as they occurred. When the writer first went to Mosul, Mohammed Injeh Bairakdar[1] was pasha of that province, extending from Bagdad to Diarbekir, and from the desert of Mesopotamia through Kûrdistan to the borders of Persia. When the Kûrds rebelled against his extortions, their villages were laid waste; and while many were put to death in different ways, some of them were impaled alive near the bridge that crosses the Tigris at Mosul, just as Assyrians had put prisoners to death more than two thousand years before; only, while they inserted the stake at the breast of their victims, he seated his on its sharp point, and left it to work gradually upwards in their writhings, till death came to their relief. This was before the sultan had taken away the power of inflicting capital punishment from his subordinates, and shows that it was taken away none too soon. In passing to and from the country of the mountain Nestorians, the writer has often passed three or four villages in succession utterly desolate, and others were but little better than ruins. The fault was not in the climate or the soil of these fertile valleys, but it was the result of merciless oppression. According to the accounts of those who still remained, the tax-gatherer was accustomed to overestimate the crop, and demand the larger part of it for taxes; and if the owner was known to have money, he had to redeem it at double the market price. Sometimes whole villages fled from an oppression too terrible to endure; and it shows how terrible it was, that when, under his successor, the men of one village, after vainly asking some alleviation of their burdens, left their homes, set fire to their ripening grain, and fled into the territory of Badir Khan Bey, saying it was easier to do that than to reap and thresh the harvest for the Turks, the remark in Mosul was: "Under his predecessor they would only have dared to flee singly and in the night-time."[2]

The writer was sitting with the late Dr. Azariah Smith in the divan khaneh of a Turkish officer, in Dawoodieh, when a Nestorian came in with the taxes of his mountain hamlet. The sum to be paid was three hundred tcherkies — a man from this same place afterwards told me, with great satisfaction, that he had obtained a situation near Mosul, where, besides his food, he got half a piaster, equal to one tenth of a tcherky, a day — and a bag was produced, so covered with patches one could hardly tell the original material, and the tax-payer began to undo the fastenings. The Turk snatched it from his hands, and cut it open with his dagger. Among the pile of base Turkish money that poured from it were some ancient Polish and Venetian coins, taken, doubtless, from the head-dresses of the women, where they had been preserved for many

[1] Mohammed the Little Ensign.

[2] *Dr. Grant and the Mountain Nestorians*, pp. 207–209.

generations; a small gold coin, most likely from the same source, was carefully wrapped up by itself, and sewed inside one corner of the bag. The fact that the women never part with such heir-looms except under the pressure of the direst necessity, shows the extremity of these poor villagers. But the Turk, counting these much below their market value, pronounced the amount twenty-three tcherkies short, and bade the astonished rayah bring the deficient twenty-three, with fifty more to pay him for his trouble, within two days, or tell his people to flee, if they had a place to flee to, for he would come and help himself at the head of his soldiers.

It may give a further insight into the dealings of these Oriental stewards to add that Mohammed Pasha wrought a sulphur mine near Mosul, and made his own powder. He sent the surplus sulphur to Bagdad for sale, and, when that market was glutted, divided the stock on hand among the various sects of the rayahs in Mosul; and, willing or unwilling, each had to buy so much sulphur at double the market price. The rural districts were often drained of money; then their taxes were received in kind; and what was not needed for the commissariat of the pasha was disposed of in the same way. If an animal died on the road or was eaten by his soldiers, its ears had to be paid for as though it were alive. A Moslem told Dr. Grant that he had to pay more for a certain monopoly than the amount of the article sold. "How, then, can you pay it?" "Oh, last year I farmed another article and prospered. The pasha heard of it, and this is the result."[1] The *known* amount of his exactions for the year 1841 — for many of them would not bear to be published — was three million one hundred and ninety-five thousand five hundred (3,195,500) piasters. The extent and severity of his oppression is recorded only too legibly in the decrease of European imports from nine hundred and sixty-six (966) bales in 1835 to ninety-four (94) in 1841.[2]

Now, if the same pressure brought to bear on the unjust steward were visited on one of these collectors of Turkish revenue, would he change his tax-bills from right to wrong, or from extortionate excess to justice? This would make the tax receipts tally with the amounts paid in at headquarters, and legitimately expended in the pashalic; and it would also make him friends among the late victims of his rapacity, especially if, as an Oriental would be sure to do, he represented the change as proceeding from himself, contrary to the wishes of his superior.

Granting that these facts present one of the worst phases of the matter, for Mosul lies far in the interior, out of the reach of the ameliorating influences that affect the sea-ports of the empire, and Mohammed Pasha was noted for energy and severity, yet some of his successors, though possessed of less administrative ability, abated no jot or tittle of his rapacity. It was the old story of Solomon and Rehoboam over again; and this state of things in Bible lands to-day illustrates this parable spoken to disciples, some of whom had themselves sat at the receipt of custom, and, therefore, belonged to a class odious then, for the same reason that it is to-day. Those Jews who were willing to

[1] Do., p. 208.

[2] Do., pp. 207-211, 28-30; see also Col. Chesney's *Euphrates Expedition*, Vol. II, Appendix E.

encounter the odium of being publicans incurred it for a consideration, and we find Zaccheus promising at his conversion to restore the proceeds of false charges fourfold. Why, then, go out of the way, at least in the view of an Oriental, to make our Saviour even seem to present acts of injustice for our imitation, when the probability is that they were rather acts of righteous restitution?

Perhaps it may be objected that the steward was said to waste his master's goods — and writing fifty wrongfully for a hundred looks more like wasting than to write it so when truth required it. The objector, however, fails to notice that this wasting was done previous to the changing of the bills, and must, therefore, refer to something that had already taken place; and what can that be but this extortion so common in Eastern lands, both now and then? Besides, is not anything wasted when it is turned aside from its proper use and from its lawful owner? and was not the money embezzled by this unjust steward literally wasted when it was not only plundered from his master, but, like most ill-gotten gains, squandered by himself? — for, with all his stealing, he had laid up nothing, and, if he lost his place, had no alternative but to beg or engage in the lowest manual labor. While in office, his superior had never looked after his management so long as he received the rent agreed on, but, now that he hears the steward has been receiving so much more than he has paid over, he demands a sight of the accounts; and the guilty one meets the emergency, not by honest confession of his wrong-doing, but by such a covert manœuver as he hopes will both set him right with his employer, by inducing him to think that the receipts of the tenants have corresponded with the payments to him, and at the same time secure the good will of the whilom victims of his own injustice. Is it said, still, even so there is deceit and wrong? To this we make two replies. First, the wrong is not in the thing done, but only in the motives for doing it. Even though it may be done from a wrong motive, it is intrinsically right to rectify a false charge, and so at least we get rid of the burden of supposing that Christ commends an act dishonest in itself to our imitation. Second, the Lord himself is careful to notify us that the transaction does not proceed from right motives, when he presents it to us as the act of one of the "children of this world," seeking mere worldly good, from worldly considerations, and so actuated wholly by worldly motives.

It is not intended to give a detailed exposition of the parable, but only to rid it of what so many feel to be a grievous burden in the current exposition, and to do this on grounds entirely Oriental, in distinction from philosophical or even grammatical. No violence has been done to any word, phrase, or grammatical construction; and if it were necessary, it could easily be shown that the moral force of the lesson which our Saviour intended to teach is in no way weakened by this interpretation, but only rid of a grave difficulty that attaches to the prevailing mode of exposition.

An incident at one of the villages deserves mention in this connection. After passing several villages totally desolate, on our way to Ashitha, in April, 1843, we came to Bastawa, the home of the chief of Mezûry, also deserted. His wife was there, with a few attendants, securing their rice. Entirely differ-

ent from those about her, her appearance awakened our interest. The tassels of a silk shawl depended gracefully from the lower part of her turban. A green silk saltah or jacket, lined with fur, but now much the worse for wear, covered a dress of coarse blue cotton, suggesting a sad contrast between former wealth and present poverty. Her features, once beautiful, now showed a spirit roused rather than broken by misfortune. Dr. Grant asked if she could furnish us lodgings for the night. At the word, the smouldering fire burst forth. Rising to her full height, she threw back her braided hair with one hand, and, pointing with the other to the roofless houses and her ruined home, "See there!" said she; "you have stripped us of all; you have driven us forth to beg; and now do you ask our hospitality? Go to those with whom you have still left something; and may God be judge between us." She said much more, but this was the substance of her words, translated by our servant. Gesture, look, and tone could not have been improved, and yet there was no lack of self-control. Her spirit would not yield to the violence of passion. There was a dignity of sorrow that moved us even more than her words, and made them understood even before they were translated. We were heartily ashamed of our Turkish costume, that led her to mistake us for her oppressors. When she learned who we were, she at once offered to share with us the few comforts she had brought with her to the village; but as there was nothing for our horses, we had to go on, thinking more of the heroine of Bastawa than of our own discomfort.[1]

As an illustration of the results of such oppression in the interior of Turkey, take the following scenes witnessed in Amadia during the same journey, which, after the lapse of thirty-seven years, abide in the memory like a vision of the lost.

In the court of a synagogue we found some thick masses of wet leaves, covered with mould — we could not call them books. They were volumes of the Talmud laid out to dry. Inside, the rough posts that sustained the roof were rotten. The rain had worn deep holes in the soft clay floor; we could scarce find a place hard enough to stand on. The damp, heavy air was intolerable; yet this was their regular place of worship, and here more than forty rolls of beautiful Hebrew manuscript were going to decay.

Dr. Grant went from there to see a sick man; and, on leaving the ruinous shelter, we were surprised to hear that it was the home of one of their leading men. If the houses of the rich are so comfortless, what must be the homes of the poor? We soon found out, but how shall we describe them? Without door or window, save holes in the wall, half choked with rubbish; scrambling down the loose slope, one enters what looks like a dungeon, so dark he can scarce discern its emptiness. A cradle and earthen pot composed the whole outfit of one; two earthen pots and a pile of rags the inventory of another. The rags on the inmates hardly served the purposes of decency; and how they endured the cold we could not imagine, for our path, when we left the town, in the pass over the mountain lay over the unmelted snow. In some places night brings relief to wretchedness; but in many of these houses was neither a rug to keep them from the damp earth or cover them from the cold. We were

[1] *Dr. Grant and the Mountain Nestorians*, p. 292.

not surprised to learn that numbers had died of hunger, and others — a thing most unusual in this land — had put an end to the existence too miserable to endure. One Jew had first killed his wife and then himself.[1]

Biblical Researches in Palestine, Mt. Sinai, and Arabia Petræa, in 1838, by E. Robinson and E. Smith, was the most valuable contribution ever made to the geography of Syria. Three volumes were published in 1841, at Boston, London, and Halle. Another volume, embodying the results of travels in 1852, was published at Boston, London, and Berlin, in 1856. The work wrought a complete revolution in Biblical geography, both in this country and in Europe; nor has it been superseded by any later production. It still holds unquestioned supremacy, as the most full, accurate, and trustworthy description of that country, though the publications of the "English Palestine Exploration Fund" furnish the results of more recent and thorough exploration of particular localities. The writer found that the volume describing the region passed through, in any part of his journey through Palestine, was a better guide than any native he could procure on the spot. It told just the things he wanted to know, and no cross-questioning was needed to get it.

No small part of the minute accuracy of this work is owing to the familiar acquaintance of Dr. Smith with the language and the people. As Dr. Robinson says himself: "I count myself fortunate in being associated with one whose familiar and accurate knowledge of Arabic, acquaintance with the people of Syria, and experience in former journeys, fitted him for the work. Indeed, to these qualifications of my companion, combined with his taste for geographical and historical researches, and his tact in eliciting and sifting information from Arabs, are mainly to be ascribed the more important and interesting results of our journey; for I am well aware that, had I traveled with an ordinary interpreter, I should have undertaken much less than together we accomplished, while many points of interest would have been overlooked, and many inquiries remained without satisfactory answers."[2] Then, in the preface to his later volume, he adds: "That very much of the success and comfort of the journey depended on the long and familiar acquaintance possessed by my companions with the language and character of the people, I need not here repeat." Dr. Smith accompanied him on this last journey to Jerusalem, Hebron, and as far north as Hasbeiya; Dr. W. M. Thomson to Banias and Damascus, and Rev. S. Robson thence via Baalbek and the Cedars to Beirût. Each kept his own separate journal, and the volume was compiled from them all. If Dr. Robinson studied thoroughly the works of previous writers on Biblical geography, Dr. Smith also studied with equal assiduity the writings of Oriental authors on the same subject; made out full lists of places, so far as he could get them from Arabic books, or acquaintances familiar with the several localities, and then verified them on the spot, with a tact and thoroughness that would have been impossible to a stranger to the Arab character, even though he might have known the language. One hundred and fifty pages relating to Arabic names, in the third volume, are his work, and the whole

[1] Do., pp. 299-300.

[2] *Biblical Researches*, Vol. I, p. 2. First edition.

of the manuscript of the three previous volumes was revised and corrected by his accurate pen. Manuscript maps of Rev. I. Bird, another missionary, gave fullness and correctness to Dr. Robinson's map of Mount Lebanon. Rev. G. B. Whiting furnished many valuable hints to Dr. Robinson, in Jerusalem, suggested by his residence for a number of years in that city. It was his remark, that the stones at the southwest corner of the temple had always seemed to him a portion of a large arch, that suggested to Dr. Robinson the idea that it formed part of the ancient bridge from the temple to the Xystus. Dr. Robinson himself had thought it only a bulging of the wall occasioned by an earthquake.[1]

If, then, as Americans, we are proud "that it was reserved for a fellow countryman in our own day to furnish the learned of both continents with the most accurate and thorough work ever written on that interesting country,"[2] let us not forget how much, in this instance, geographical science is indebted to foreign missions.

The first number of the *Bibliotheca Sacra*, issued by Dr. Robinson in February, 1843, is occupied as far as page 88 with corrections and additions to the *Biblical Researches*, received from Dr. E. Smith and Dr. S. Wolcott, who wrote an article on maps of Palestine in the *Bibliotheca Sacra*, 1845, pp. 585–590.

Prof. C. E. Stowe, in introducing a letter from Dr. H. Lobdell — stating that the people of Mosul, Moslems, Christians, and Jews, all agree that Jonah's gourd was not the *ricinus communis*, as scholars generally suppose, but a kind of pumpkin (Arabic, *k'er'a*) — takes occasion to say: "The interest of missionaries in the Bible, and their familiarity with its original languages, give a peculiar value to their personal investigations, beyond those of ordinary travelers, however well qualified otherwise." "Dr. Robinson's invaluable *Biblical Researches* could not have been made in their present perfection without the aid of the learned missionary, Dr. E. Smith."[3]

Rev. S. H. Calhoun gives a beautiful description of the cedars of Lebanon,[4] in the *Bibliotheca Sacra*, and the writer published two articles in the same periodical,[5] on Mount Lebanon: its geographical connections, rivers, geology, scenery, climate, productions, zoölogy, roads, population, and antiquities.

Rev. L. Thompson gives an account of "the religious sects of Syria,"[6] in which much valuable information is brought together, at the cost of no small labor.

Life Scenes Among the Mountains of Ararat, by Rev. M. P. Parmelee, sketches some delightful home pictures of Oriental life in northeastern Turkey, and gives many valuable and interesting geographical facts.

Rev. C. H. Wheeler's *Ten Years on the Euphrates*, though mainly devoted to the history of missionary work, does not lose sight of other things. It gives us a vivid portraiture of the people; and, among other things, a map of that missionary field, containing many names of villages not found elsewhere. It

[1] *Biblical Researches*, Vol. I, p. 424. First edition.

[2] Address of J. Pickering, first president of American Oriental Society, at its first annual meeting. See *Journal of American Oriental Society*, Vol. I, p. 22.

[3] *Bibliotheca Sacra*, 1855, p. 398.

[4] Do., 1857, pp. 200–201.

[5] Do., 1869, pp. 541–571, 673–712.

[6] Do., 1857, pp. 525–537.

gives a vivid sketch of a very successful endeavor to make even very poor missionary churches self-supporting; and his *Letters from Eden* give interesting interior views of the missionary work in its details and results.

Dr. W. M. Thomson is almost without a peer in the variety and value of his contributions to the geography of Syria; though his principal work, *The Land and the Book*, is devoted to bringing out the relations existing between the Bible and the lands in which it was written. He found the names of persons, places, things, and incidents all around him illustrating and confirming Holy Scripture, and sought to make all Christendom partake with him in the light his long residence in Syria poured upon the pages of the Word of God. The *Bibliotheca Sacra* truly says of it: "If the Syrian mission had produced no other fruit, the churches which have supported it would have received in this book an ample return for all they have expended. The plan of the book is unique. It is a book of travels, a book of conversations, a running comment on the Scriptures, and a pictorial geography and history of Palestine, all in one." Dr. A. P. Peabody says of it: "Of literature illustrative of the Bible, I know of no work so well arranged, so affluent, and so equally adapted to the purposes of reference by the scholar and of familiar use by the ordinary reader." [1]

His original work, with maps and engravings prepared expressly for it, embodied all that was of value for the illustration of Scripture in our knowledge of Palestine up to that date. Since then others have followed him in the same line of investigation, and now he is re-writing the work on a larger scale. The first edition was reprinted in England, and the new one appears simultaneously from the presses of the Messrs. Harper in New York, and of Thomas Nelson & Sons, Edinburgh, Scotland. As yet only the first of three volumes has appeared; a goodly broad octavo of 592 pages, and got up without regard to expense. The illustrations were good in the first edition; now they are not only exact reproductions of the scenes they represent, but the engravings are in the highest style of art.

More than most missionaries, Dr. Thomson has traversed over and over again the scenes which he describes so graphically. From the beginning of his missionary life, in February, 1833, his attention seems to have been drawn to this line of study, and in this work we have the ripe fruit of nearly fifty years of careful observation. He is the pioneer in this branch of knowledge, and readers of the Bible the world over owe him a debt of gratitude for this labor of love.

One great value of this new edition is that all the latest discoveries are embodied in his description of the various localities. The thorough work of the "English Palestine Exploration Fund" and the cream of other travels go to increase the value of the book. It is not a wooden building repainted and patched up here and there, but it is a stone structure taken down to the foundation and rebuilt with much new material on a better plan. In the former edition he began at Beirût, and took his reader along with him to the south. In this he lands at Joppa, and enters at once on the promised land. Many of the old facts are repeated, but in better form and new connections, and new facts

[1] *North American Review.*

are collected from all sources, composing sometimes more than half the chapter; making this by far the best work on the subject now, as the first edition at once took the lead in 1859.

The spirit of the work appears in the following paragraph:[1] "The range of topics, historic, moral, social, and religious, that illustrate the Bible, is wide and surprisingly diversified. Think, if you can, of a Bible with all these left out, or others essentially different in their place — a Bible without patriarch or pilgrimage; with no bondage in Egypt, or deliverance therefrom; no Red Sea; no Sinai, with its miracles; no wilderness of wandering, with all the associated incidents; without a Jordan with Canaan over against it, or a Dead Sea with Sodom beneath it; no Moriah with its temple, or Zion with its palaces. Whence could have come our divine songs and psalms, if the sacred poets had lived in a land without mountain or valley; with no plains covered over with corn, no hills planted with the olive, the fig, and the vine? All are needed, and all do good service, from the oaks of Bashan and the cedars of Lebanon 'even unto the hyssop that springeth out of the wall;' we can dispense with none of them. The tiny mustard seed has its moral, and the lilies of the field their lessons. Thorns and thistles utter admonitions and revive sad memories. The shepherd and his flock, the sheep and the fold, the ox and his yoke, the camel and his burden, the ass and his owner, the horse with neck clothed with thunder; lions that roar, wolves that raven, foxes that spoil, harts panting for water brooks, and roes feeding among lilies; doves in their windows, sparrows on the house-top, storks in the heavens, eagles hasting to the fray; things great and small; the busy bee and the careful ant laying up store in harvest — these are merely random specimens out of a world of rich materials, all congregated in this land, where their presence was needed to enrich and adorn the revelation of God to man."

Again: "The physical features of Jerusalem and the regions round about it are made to furnish the natural basis for one of the most delightful prophecies in the Bible.[2] Ezekiel was a priest, occupied with the temple service, and, therefore, perfectly familiar with the outlook from the temple down the valley of the Kedron out into the desert, and away southeast to the Dead Sea. He also knew the different fountains along the valley, and their peculiar action. Underneath the temple platform are immense cisterns, and from them, as is supposed, water descends in a small stream to the remitting fountain of Mary, for, at the end of the first thousand cubits, 'the waters were to the ankles.' Further down, near the pool of Siloam, the stream, much enlarged, reappears: 'the waters were to the knees.' At the end of the third thousand cubits, below the well of Job, where the water even now breaks out from many places, forming a lively mill-stream, 'the waters were to the loins.' This, however, only occurs, in our day, during long-continued and heavy rains. I saw such an outflow once, and then many of the inhabitants of Jerusalem were gathered there in holiday costume, rejoicing at the rare event, which is believed to promise abundant harvests. Farther down, still other tributaries swell the stream into 'a river that could not be passed over.'

[1] pp. 127-128.

[2] Ezek. xlvii: 1-12.

CESAREA AND MOUNT ARGÆUS.

"There were many things peculiar and significant in this: its source, 'at the south side of the altar;' its course, 'toward the east country,' 'into the desert,' 'into the sea,' *i. e.*, the Dead Sea; its rapid increase from a mere rill at the beginning to a river 'to swim in;' and, last of all, its effects: 'Everything shall live whither the river cometh.' On either bank 'grow all trees for meat, whose leaf shall not fade, neither shall the fruit thereof be consumed.' What a contrast to the present banks of the Kedron — a wilderness — with nothing to relieve its frightful desolation! But wherever this river from under the sanctuary comes, the desert blossoms, the banks are shaded with trees, and vocal with music of birds. And, more wonderful still, the river 'being brought forth into the sea, the waters shall be healed.' Now, this sea of Sodom is so bitter that, although the Jordan and other streams have poured into it sweet water for thousands of years, it continues as nauseous as ever. Nothing lives in it; neither fish, nor reptiles, nor even animalculæ; but when the waters from the sanctuary come thither, the shores will be robed in green, its depths shall teem with fish, and 'fishers shall stand on it from En-gedi even unto En-eglaim: they shall be a place to spread forth nets: their fish shall be as the fish of the great sea, exceeding many' — not that a physical miracle is here predicted, but only a spiritual allegory, which foreshadows miracles of mercy in store for the whole world."[1]

It would be pleasant to transcribe other descriptions, but these must suffice. The reader of the work will find no lack of them in any part of it.

In Turkey, Rev. W. H. Gulick visited Arjish Dagh,[2] near Kaisarieh,[3] and noted the resemblance of its volcanic rocks to those of the Sandwich Islands. Rev. W. A. Farnsworth made the first ascent of it in recent times — a noteworthy fact, as, with the single exception of Ararat, it is the highest in the Turkish empire. Like that, though a spur of the Taurus range, it stands alone in a vast plain, a huge cone thirteen thousand feet in height, and covering an area of three hundred square miles. It is an extinct volcano, and many cones rise along its sides, some of them higher than Mount Washington. The people say that the giant who built the mountain let these fall through the bottom of his basket. The peak is bare for three thousand feet. On September 13, 1827, Rev. E. Gridley reached within four hundred feet of the summit,[4] but died in consequence of exposure in the ascent. In 1873, Mr. Farnsworth attempted to reach the summit, but got no farther than Mr. Gridley, the same precipices preventing his advance; but now, on the 25th of August, 1874, he succeeded in attaining to the highest point. He pitched his tent high up, near the limits of perpetual snow, as the base of operations, and went up with horses as far as the old crater, or crater valley, surrounded by precipices on three sides, the northeast side alone being broken down; from this place he climbed on foot the southern wall, and reached a semi-circular ridge, as regular as the rim of a bowl, on which he advanced for three hours, so steep on the north that one could not step down even a few feet but at the peril of his life, and on the south so steep and smooth that large stones once started went down till the eye

[1] pp. 422–426.
[2] Mons Argæus.
[3] Cæsarea.
[4] *Missionary Herald*, 1828, p. 259.

could no longer keep track of their descent, though nothing intervened to hide them.

Arrived at the precipices that stopped Mr. Gridley, he was in doubt whether to try to pass round by the south or the north side. Some small stones rushing down on the north decided the party to try that, and soon they stood on the base of the peak above the wall of rock. Here some concluded to stop; but Mr. Farnsworth went on alone for an hour of hard climbing, when, rejoined by one of his companions, an easy walk of twenty minutes brought them to the summit. To the south and east, the air was clear, and the view exceedingly grand; but in other directions it was blurred by a fog, caused by the wind from below striking the huge banks of snow. It was of no use to wait, for they were where the clouds were made, and they saw the process going on. The air, clear at a little distance, grew thick as it approached the snow at their feet, and drove over the edge of the rock, not ten feet away, like drifting snow. Bleak and bare as the peak was, a little bird was flitting about, and a tiny flower bloomed in a sheltered nook on its southern face.

Thinking it might be easier, they went down on the southern side of the crag, but found it more difficult and dangerous than the other. On the ridge they found a practicable path down to the bottom of the crater, and descended more than twelve hundred feet in a few minutes, providentially unharmed. Here the snow was more abundant than on the ridge. In one place the bank of snow was unbroken for a mile, and dotted over with innumerable pebbles, and here and there a boulder that had fallen from above. These rolling stones constitute the chief danger of the ascent.

The two reached the horses at the same time with the others, and arrived at the tent as Jupiter and Venus began to show themselves near the summit. The party consisted of two Americans, two Armenians, and a Turk; and had the atmosphere allowed it, the whole of Cappadocia, and parts of Galatia, Lycaonia, Cilicia, Pontus, and Armenia would have been visible.[1]

Rev. G. W. Dunmore traveled more than six thousand miles in Turkey, and one thousand in Persia and Russia. There is much geographical information in the *Memoir of Dr. Lobdell*, both ancient and modern, concerning the country from Beirût via Aintab and Diarbekir to Mosul; from Mosul to Bagdad and Babylon; and to Kûrdistan and Persia. Rev. J. H. Shedd gives an account of a tour in Kûrdistan,[2] and another across the uplands of Media to Hamadan,[3] the summer residence of Cyrus, as Shushan was his winter home. Its population, mostly Moslem, is sixty thousand. The climate, owing to the snow of Mount Elvend, is colder than Oroomiah. A part of his route was new to Europeans. The Jews there he regards as probably descended from the lost tribes. In places the soil is so rich in fragments of the precious metals, that it is sold by the donkey-load, and washed by the Jews. He describes the tomb of Mordecai and Esther, in Hamadan.[4]

Rev. T. D. Christie gives the following description of a scene in the heart of the Taurus mountains: We crossed the gorge of the Gaok Su by a road cut

[1] *Missionary Herald*, 1875, pp. 122–124.
[2] Do., 1870, pp. 191–194.
[3] Ecbatana.
[4] *Journal of American Oriental Society*, Appendix, 1871.

zigzag down a perpendicular cliff for a thousand feet, and as steep in the ascent on the opposite side. We approached Hadjin from the north, over heights of seven or eight thousand feet. The road winds round one of these peaks, and all at once a valley like an immense mill hopper lies before you, surrounded by lofty mountains. Two thirds down, a narrow ledge projects towards the south, and ends in a precipice at the center of the valley. This is covered with houses — its top, its sides, tier below tier, five streets down, if you can call them streets. The houses rest on tall posts where the rock is not wide enough for an entire foundation. It is a hive containing twenty thousand human beings; resembling a huge honey-comb cut open so as to show the cells. One could almost toss a biscuit on the flat roofs a thousand feet below. We wound down the stair-like road till, as we neared the houses, though still high above them, there were signs of commotion in the hive; the roofs began to swarm with people, and we could see others hurrying towards us in the narrow paths between the houses. It must have been a dreadful degree of violence and insecurity that drove human beings to select such a place to build their homes.[1]

Rev. L. H. Adams also describes the scenery of Giaour Dagh,[2] a mountainous region three days northwest from Aintab. There, in some places, the rocky strata stand perpendicular, like our own Palisades, forming walls for miles, hundreds of feet in height. He also describes the mountaineers, who set the Turks at defiance, or obey them only in a way to suit themselves.[3]

Dr. Hamlin's volume, *Among the Turks*, gives some interesting geographical information concerning southern Macedonia, and abounds in graphic pictures of Turkish life, government, institutions, and religions. In it we have the conclusions of one whose opportunities for observation have rarely been equaled, and who adds to personal narratives other incidents, which let us into the inner life and character of the people.

CENTRAL TURKEY.

The following account of Central Turkey, by Rev. Henry Marden, of Marash, is a good specimen of the contributions of our missionaries to the science of geography in Western Asia.

"*The Country and its Products.* The mission field called Central Turkey lies around the northeast corner of the Mediterranean Sea, extending inland some two hundred miles. It includes Tarsus, the birthplace of Paul, and Antioch, where the disciples of Christ were first called Christians. The Taurus Mountains, extending from Smyrna to Ararat, ten thousand feet high, with snow on their summits nearly the whole year, cross its northern borders. Between Antioch and the sea is the Amanus range, with the famous pass called the Syrian Gates, and north of Tarsus, in the Taurus, are the Cicilian Gates, both famous in ancient history. East of Tarsus is Issus, the battle-field of Alex-

[1] *Missionary Herald*, 1879, p. 303.

[2] Infidel mountain.

[3] *Missionary Herald*, 1867, pp. 243–244.

ander and Darius. The old Euphrates, one thousand feet wide and ten feet deep, flows through the eastern part, on its way to the Persian Gulf.

"The face of the country is about equally divided between mountains and plains. The mountains are high ridges of whitish limestone, some without a tree or shrub, others covered with a scanty growth of bushes, while here and there are seen straggling forests of oak and pitch-pine. The valleys are frequently watered by cold, clear streams, flowing directly out of the mountain side, and are very productive. The soil in the plains is rich and deep. From December to May it rains perhaps one fourth of the time, with an occasional sprinkling of snow; but from May to December not only is rain almost unknown, but rarely is a cloud to be seen, especially in the interior, while the sun pours down its scorching heat day after day. The mercury seldom rises in the shade above 110°, except in the lower plains. On the mountains the air is cool and refreshing. Wheat and barley are sown in November, and harvested in May and June. The grains are wheat, rice, millet, barley, and Indian corn. Vegetables are grown in irrigated gardens in summer. The varieties are onions, garlic, egg-plant, okra, tomatoes, melons of all kinds, squashes, and carrots. Cotton and tobacco are grown in many localities. The plow is the crooked stick of Abraham's day, with an iron point. This plow and a common pickaxe are the chief farming implements, for harrows, cultivators, hoes, and rakes are unknown. The watered ravines in the mountains are generally filled with orchards of apricot, peach, mulberry, pomegranate, fig, plum, pear, English walnut, and almond. On the shore of the Mediterranean are large groves of orange and lemon, with here and there a date palm tree and cactus hedge. The domestic animals are camels, horses, mules, donkeys, cows, sheep, goats, and buffaloes. No hay is gathered, and there is but little grazing, except for sheep and goats. All other animals are fed, especially in winter, with barley and straw.

"Grapes of the finest quality are raised in immense quantities. Some cities have twenty-five square miles of vineyards spread over the neighboring hills and mountain sides; and though the grapes are so abundant and delicious, not a drop of rain is expected from the time the vines leave out till the grapes are gathered, and they are never irrigated! The grapes are eaten fresh, are dried for raisins, and are also made into sweetmeats of many varieties. An intoxicating drink called 'rakky' is made to some extent, but wine is seldom seen. The use of intoxicating liquors is confined largely to government officials and soldiers, and to those men who have come more or less into contact with the civilization of southern Europe. Tobacco is never chewed, but is smoked by all classes.

"*The Cities — the People.* Aleppo and Adana are the chief commercial cities, whence European merchandise is sent hundreds of miles into the interior. The chief seaports are Alexandretta and Mersin, which are visited every week by steamers from Marseilles and Constantinople. There are no carriage roads, but mere trails from city to city. The great thoroughfare from Alexandretta to Aleppo and Bagdad, though used for perhaps forty centuries, is

in some places a single donkey path. All transportation is done by caravans. The people live either in cities or villages, with their houses built as close together as possible. Cities have no suburbs, and the outside rows of houses are the poorest and cheapest. No man dares to live at a distance from neighbors. The village houses are generally made of sun-dried brick, sometimes of mud and cobble-stones, while the larger cities are built of well-cut limestone, with flat earthen roofs. Thousands of people live in tents made of black hair-cloth or merely reed matting. The population is made up of five or six distinct nationalities.

"The great Aleppo plain is dotted over with the black tents of the Arabs. The Antioch plain has many villages of Turcomans. These Turcomans are a branch of the Turkish race, living in tents as shepherds, and quite separate from other classes of the population. A little further north are thousands of Kûrds, descendants of the ancient Carduchi whom Xenophon, 400 B. C., found in these same mountain fastnesses. Two thirds of the population of the cities and towns, and the entire population of numerous villages, are Turks, lineal descendants of the wild Tartar warriors, who came down from Central Asia hundreds of years ago and conquered all Asia Minor. The government is still in their hands. Upwards of one hundred thousand Circassian refugees from Turkey in Europe were scattered through Central Turkey in 1878. They are merely armed tramps, feared and hated by all classes. The other third of the population of the cities, including some mountain villages, are Armenian Christians. In the eastern part of the field are a few thousand Syrians, the remnant of an ancient race.

"In nearly every city is a community of Roman Catholics, sometimes numbering several thousands, as in Aleppo, while various fragments of other Christian sects are scattered here and there. The Arabs, Turcomans, Kûrds, Turks, and Circassians are all Mohammedans, with scarcely an exception. The Armenians, Syrians, and various smaller communities, are nominal Christians. They, with the Kûrds, are descendants of the original inhabitants of the land. The conquering Moslems gave them their choice between the Koran, tribute, and the sword. The Kûrds, who had never become Christian, accepted Mohammedanism. What Christians were left after the bloody wars, still adhered to their faith and paid tribute. Each sect retained its own language, forms of worship, and customs, and their religion apparently consists largely of lifeless formalities, without influence upon the character.

"*The Languages and Religions.* The language of the Arabs is Arabic, the Kûrds speak Kûrdish, the Circassians, Russian; but while many individuals of these classes speak also Turkish, the Turcomans and Turks speak only Turkish, except in Aleppo and vicinity, where they speak Arabic. Yet every Moslem performs his religious services in the sacred Arabic. It is not considered essential that he understand the prayers he repeats five times a day! All the Christian sects have been so overshadowed by the Turks that they have learned their language. However, the Armenians generally in their homes speak the modern Armenian, but conduct their church services in the ancient Armenian.

The Syrians speak the modern Syriac at home, Turkish in the street, and worship God in the ancient Syriac. No one doubts that Babel was somewhere in this vicinity.

"In Central Turkey the Christian population is chiefly Armenian. They are a fragment of the old Armenian nation that in the time of Christ, and perhaps in Abraham's day, was located near Mount Ararat. They have maintained their national identity most remarkably. It is claimed that in the third century their king was converted and ordered the nation to be baptized, when doubtless some pagan rites received a christening. Chosroes, emperor of Persia, persecuted them. A few centuries later the nation was overrun by the Turks, large numbers were put to death without mercy, others fled from their homes, and their descendants are now found in all parts of the Turkish empire, and many have emigrated to other lands. Despite this rough treatment, for these hundreds of years they have clung with wonderful tenacity to their Christian name, and to the forms, at least, of a Christian faith.

"*Aintab — The Armenians.* In the city of Aintab there are thirty thousand Turks, with sixty mosques, from whose minarets their muezzins five times every day shout the call to prayer. There are ten thousand Armenian Christians, with their church edifice, built centuries ago. If we could look into their church as it appeared thirty years ago, we would find an audience of perhaps a thousand men. The priest stands before the altar and reads from a prayer-book in the ancient Armenian, which is probably understood by no one in the audience, and possibly he himself merely repeats what he has memorized. The people know when to bow, when to kneel, and when to cross themselves. They perform their part and the priest performs his, and at the close of the service the men come forward, kiss the sacred crosses on the huge Bible, which none of them can read, cross themselves before the pictures of saints upon the walls, and go home. But where are the women and daughters? They are not allowed to enter the body of the house, but, closely wrapped in white sheets, climb up the dark stair-way to a narrow gallery, and sit behind a lattice, where, unable to hear anything, they can only have a sociable by themselves. Such were the religious privileges of these ten thousand nominal Christians.

"*Mission Progress at Aintab.* The first missionary was stoned out of the city by a mob, at the instigation of an Armenian priest, but a few earnest men gladly received the truth, and a little church was organized. Then followed Sunday schools, prayer meetings, day schools, pastoral work; and the first converts, like Philip, brought many a Nathanael to Jesus.

"Thirty years have passed. There are now in Aintab two thousand enrolled Protestants, two churches, more than six hundred church members, admitted on the same conditions as in New England, two Sunday schools with from seven hundred to eight hundred members in each, day schools for all the Protestant children, with gradations of primary, middle, and grammar schools. These two churches have their ordained native pastors, with deacons and

church committees. For a dozen years they have managed their own affairs, and have paid the current expenses of their churches and schools. The missionaries now have no control over them, and wish none. The missionaries found only one woman in the city who could read, but now nearly every woman in the Protestant community can read her Bible.

"Look into one of these Sabbath schools and see eight hundred men, women, and children study the Word of God. All are present who attend the preaching service. Both teachers and scholars give close attention to their work. Many among them can repeat the Bible story from Genesis to Revelation. An hour or two later they gather for worship. The preacher conducts the service in Turkish after the manner of the evangelical churches in America. The hymns are Turkish translations of our sweet songs of Zion, and are sung in the same old tunes by the whole congregation. That kind-faced deacon near the pulpit helped stone the first missionary out of the city. The man in the middle of the audience, with a deep scar on his brow, is a converted robber. A third congregation of some two hundred has recently been gathered in the city, and is working its way up towards self-support.

"*Change Among the Armenians — The Moslems.* Look with me again into the old Armenian church. You hear again the service in the sacred language of the fathers, but at the close there is a sermon in Turkish by the priest, at the demand of his audience, who have learned from the Protestants that religious services should be *understood.* Near by the altar stands an Estey organ from Vermont. The pictures have mostly gone from the walls, and, side by side with the ancient Bible, which few if any could read, there lies the plain Turkish Bible, fresh from the mission press. In the Armenian schools close by, you will find the Protestant text-books, and very likely a Protestant teacher. It is said that, before missionaries came to Turkey, there was not in the whole empire a school in which the spoken language was used, while geography and arithmetic were quite unknown. The Bible is in a large number of Armenian houses, where it is often read with thoughtful interest. The effect of Protestant light can now be seen on the dark background of the Moslem faith. The old bitterness that forbade a Christian to speak the name of his Master in the presence of a Turk gives place to kind regard. It is not uncommon for a Christian not only to defend his faith before Moslems, but to plead with them to look to Christ and live.

"The attitude of the government towards Christianity still represses all spirit of inquiry among the Moslems. It cares but little how much the despised Christians change about from one creed to another, but there is yet practically no religious liberty for the Moslems." [1]

"*Marash — The Outlook for Turkey.* In Marash, our other center of mission work, instead of a college, the Theological Seminary is training men for the pulpit, and two thousand five hundred Protestants and three self-supporting churches indicate the progress of evangelical faith. Oorfa, Adiaman, Kassab,

[1] His account of the college at Aintab is omitted, as that belongs to another chapter.

Killis, Adana, and Hadjin have each from three hundred to one thousand Protestants, with a self-supporting church. More than thirty other cities and villages in Central Turkey have their churches and schools, their prayer-meetings and Sunday schools.

"The missionaries reside at Marash and Aintab, there being generally three men, their wives, and two unmarried lady teachers in each of these two cities. The ladies have charge of the boarding-schools at the centers, and a general supervision of the schools and special work for native women in out-stations. The missionaries at Aintab have charge of the College, and the missionaries at Marash of the Theological Seminary; while from each place as a center they supervise the general mission work, making frequent tours over the field on horseback, preaching as occasion may require.

"These same evangelical influences are at work in all parts of the empire. But few cities or towns are now without a community of Protestants, with its church and school. In Asia Minor alone there are more than two hundred places of worship where the living preacher every Sabbath proclaims the Gospel message in the languages of the people. The whole Turkish empire is indeed starred all over with churches and schools, with Christian homes and family altars, each a center of life and light, sending out its sacred influences into the surrounding darkness.

"It is said that Turkish birds never sing. But, one summer morning, I wandered down through the gardens for an hour's rest. In the hedge by the path a nightingale was pouring forth its song, so sweet, so pure, it seemed like an echo from the upper world. So the sweet sound of the Gospel is heard here and there all through the land, waking the nation into life from the sleep of a long, dreary night."[1]

The following description of Antioch, from the same pen, may show that devotion to missionary work does not interfere with interest in, and the intelligent promotion of, all useful knowledge.

"Antioch, situated on the southeast bank of the river Orontes, twenty miles from its mouth, was founded by Seleucus Nicator, B. C. 300, and its site, like that of Rome, was determined upon by the flight of eagles. Seleucus Nicator, having defeated Antigonus, compelled five thousand Athenians and Macedonians to tear down his rival's capital, Antigonea, and convey the materials down the Orontes, to his new city, which he called Antioch, in honor of his father. Its site is romantically beautiful, and strategically commands the only level road to the sea from Mesopotamia and upper Syria. The space between the Orontes and Mt. Silphius being quite narrow, the city in its glory was very long in proportion to its breadth, and contained a single street four miles long, bordered on either side by vast colonnades, so contrived as to shelter the crowds from the heat as they traversed the city. The Orontes opposite Antioch originally contained an island adorned by palaces, and connected with the main land by magnificent bridges, a feature of the city that no longer exists.

[1] *Missionary Herald*, 1880, pp. 44-50.

"The walls of Antioch, famed throughout the East, originally built by Antiochus Epiphanes, enlarged by his successors, and repaired by Tiberius, starting from the river, crossed the city, ascended the mountain, stretched along its summit, and then descended again to the river, whose city bank was strongly fortified. Much of this wall still exists on Mount Silphius, and is a splendid specimen of ancient patience and skill in warlike defenses. Antioch was a favorite retreat of most of the great Roman rulers. Cæsar, Augustus, Caligula, and Herod of Judea, all executed vast architectural works and improvements — as aqueducts, baths, and basilicas — until the city was famed even in Rome for its magnificence, and at one time contained six hundred thousand souls, being the third city in the world. The climate added to the city's fascinations. If, according to Euripides, 'the Greeks were ever delicately marching through the pellucid air,' this was preëminently true of the denizens of Antioch. The purple light of the hills, with the exquisite softness and transparency of the atmosphere, vividly reminded the homesick Athenian of his beloved Attica.

"Beautiful as was Antioch, it was well-nigh eclipsed by its famous suburb, Daphne, a vast elliptical garden over three miles in diameter by the longer axis. Here, in a splendid temple dedicated to Apollo, was a famous image of the god, sixty feet high. Serpentine walks adorned at intervals by superb statuary from Greek chisels, marble baths overflowing with crystal water from the adjacent hills, exquisite miniature temples, beautiful arches, and tiny bridges over the little winding streams that were taught to flow, now from the mouths of huge dragons, now over precipices into deep grottoes shaded by lofty trees full of singing birds, all created a delicious coolness in the fierce heat of a Syrian sun, and a luxury so dangerous that the Roman soldiery were stringently forbidden to approach the place. Here, in purple and jewels, the most accomplished courtiers lived and reveled in pleasure. But now, the half-naked barbarian herds his goats among the ruins of Apollo's worship, and chases the fox and jackal over the ashes of classic glory.

"As to morals, we cannot praise the ancient people of Antioch. It was at once the greatest and the worst of all Greek Oriental cities under the sway of Rome. Nevertheless, Christianity in Antioch won vast trophies during the early centuries, and here was founded the church of the Gentiles; at one time there were, in the city limits, three hundred and sixty churches and monasteries. From here, Paul and Barnabas, with other devoted souls, went forth with the Gospel into the West, and as a result we are now rejoicing in its blessed hopes. Ten councils holden here, at which Arianism and other heresies were condemned, give Antioch a prominent place in church history. Among the powerful patriarchates of the early church — as Constantinople, Rome, Jerusalem, Alexandria, and Antioch — the latter occupied a conspicuous place, and exists, under the Greek (and Jacobite) churches, until this hour. In letters and oratory the city furnished some distinguished names, such as Ignatius, Theophilus, John Chrysostom, Severus, and Sergius, all famous in the church.

"The political history of Antioch is most eventful, and might be introduced by the statement that the city has been wholly or partially destroyed by earthquakes nearly twenty times, the last one occurring in 1872. On two of these

occasions, two hundred and sixty thousand souls perished in three minutes. Since the Christian era the city was captured and plundered by Sapor, of Persia, A. D. 260. Justinian rebuilt and called it 'The City of God,' in A. D. 536. After it was captured and burnt by Chosroes. Justinian rebuilt it, A. D. 562. It was destroyed again by Chosroes, A. D. 574; was captured by the Saracens, A. D. 638, and retaken by Nicephorus Phocas, A. D. 966. One hundred thousand Saracens perished in an attempt to recapture it, A. D. 970, but it was betrayed to them by its governor, A. D. 1080. After a terrific siege, Godfrey of Bouillon captured the city June 3, 1098, and next it fell into the hands of the Sultans of Egypt, A. D. 1268. It was, however, speedily turned over to the Turks, who have remained its masters to this day, except during a brief period from 1839 to 1840, when it was held by Ibrahim Pasha, of Egypt, who was compelled by the interposition of England to restore it to the Turks.

"At the present time Antioch contains about thirteen thousand souls, consisting of Moslems, Greeks, Pagans, Jews, Armenians, Catholics, and Protestants, whose numbers, commencing with the largest, follow the order of this enumeration. Missionary operations are carried on by the American Board and the Reformed Presbyterians of Ireland. The latter, using the Arabic language, have large and flourishing schools under the care of Rev. James Martin, M. D., with Sabbath and weekly preaching services, attended by considerable numbers. There is a church here, with a native pastor, connected with the mission of the American Board. The congregation numbers about seventy persons, and the church twenty-two. Efforts towards self-support are promising. Surely, in the missionary efforts put forth in Asia Minor, this ancient home of Christians should not be forgotten.[1]

"The accompanying view is an excellent representation of Antioch as it was about forty years ago. Since then the wall has been in many places overthrown by earthquake, and large sections of it have been used by Ibrahim Pasha and others in the erection of buildings. The city extends higher up on the side of the mountain than it did a few years ago."

AFRICA.

Africa has been less known than any other quarter of the world. Stanley may well call it "the Dark Continent." A French writer justly styles it "a sphinx devouring those who would solve her enigmas." Rev. D. Lindley, who was a missionary there for forty years, says: "Ordinary accounts of African travelers may be classed under three heads: half-true, untrue, and nonsense. Their information comes through interpreters, who may not know, and if they did, would not impart their knowledge to a stranger one time in a hundred."

South of the equator missionaries have been the principal explorers. Secular enterprise has done much. It sent seventeen expeditions in forty years to explore the Niger. Nineteen leaders perished in the attempt, besides scores of subordinates; yet the world commends the heroism of these martyrs to science. African missions also count their martyrs. The Moravians landed on the gold

[1] *Missionary Herald*, 1880, pp. 244–246.

ANTIOCH, SYRIA.

coast in 1736, and braved its deadly clime till eleven had fallen. Seventy-five years later the Wesleyans began at Sierra Leone, in the same spirit. Scores fell, but volunteers sprang to the vacant places.

Among our own missionaries, Rev. A. Bushnell, W. Walker, B. Griswold, I. M. Preston, H. A. Ford, M. D., and others, have penetrated the country several hundred miles from the coast, explored its streams, and discovered many towns. They have ascended the Ogova[1] three hundred miles, and visited places on the Ragali, a branch of the Gaboon, never seen by white men before. They have collected information concerning the first-known occupants of that region; of the Mpongwes, a later immigration; of the Shikanis, another fierce tribe, also from the interior, now nearly extinct; of the Bakĕles[2] and Pangwes, who followed after. These last are a superior race; of fine physique, and from a healthy climate. Mr. Bushnell thus describes them to the American Oriental Society, July, 1856: "They are numerous and warlike, independent, and a terror to their neighbors. In person they are large, well-formed, and a shade lighter than other tribes. They wear little clothing, save a preparation of powdered redwood and oil. From native ore they make beautiful and well-tempered knives, two-edged swords, and spears, and use them with skill. They have also cross-bows and poisoned arrows. They are cannibals, but only in connection with war or criminals. Their spiritual ideas are very gross."

In July, 1864, Mr. Preston explored the coast as far south as the Fernando Vaz, the southern outlet of the Ogova, a mile in width. The people speak a dialect of the Mpongwe. Up the river to the southeast, Dikĕlĕ is spoken. Mr. Bushnell wrote, in 1859, that a Frenchman who had ascended the Nazareth[3] several hundred miles found the country beautiful and densely peopled, and the inhabitants ingenious and industrious. He crossed prairies sixty miles long, abounding in wild cattle. Cotton and tobacco were largely cultivated.[4]

The Ogova, or Nazareth, bends round east of the Gaboon, and one branch comes down from the north, probably from a great lake described to Mr. Preston by a Pangwe who had come from its western shore. He could not see across, and of its other shores he knew nothing. Mr. Preston visited a lake named Ndogo, in latitude 2° 4′ south, forty miles long and from five to ten in width, never seen by white men before.

Mr. Preston thus describes the scenery in the upper part of the Nkama river, an affluent of the Gaboon. Jiduma is twenty miles above Nenge-nenge, and there the river is half as large as the Muskingum at Marietta: "In half an hour above Jiduma — to which the influence of the tide extends — we left the mangroves behind; and in an hour we had reached the hills. The river became narrower, and the current stronger. Never have I seen more beautiful scenery. The river wound between hills on either side, rising steeply five or six hundred feet. They were clad to their summits with immense trees, and these again festooned with vines covered with flowers and fruit. Here monkeys of various sizes and colors gamboled and chattered, and there sang birds of gayest plumage. At one point a land-slide had left huge piles of bare

[1] Ogowai of Stanley.
[2] Bakalai of Stanley.
[3] Supposed to be the northern outlet of the Ogova.
[4] *Missionary Herald*, 1859, p. 186.

rocks, and nearly closed the river with fallen trees. At another, the rocks, covered with strange lichens, rose perpendicularly from the water thirty or fifty feet. Yonder a small stream comes tumbling over the rocks, forming a beautiful cascade, though it is a mountain torrent in the rainy season. Here a cavern yawns, which the want of a light forbids me to explore. In an hour and a half we had passed this range of hills running northwest and southeast, and emerged into a level plain, which is overflowed in many places in the time of flood. Through this region, covered with rank vegetation and dotted with trees, roam various wild animals — hogs, cattle, deer, and elephants." [1]

It was the desire of Richardson to found a mission on Lake Tshad that led him to cross the Sahara in 1850. The most important result was the discovery of a large river flowing into that lake from the south, and of the Binue, explored a year or two later by Bishop Crowther, himself an African and a missionary.[2]

But the best exposition of the contribution of missions to geography in Western Africa is the work of Rev. J. Leighton Wilson on that country.[3] This is one of several similar works by missionaries, which we would like to put into the hands of any one who is "not aware that missionaries had ever done anything for science." It is written by no transient visitor who "could see nothing but the surface of things," but by one who had spent more than eighteen years in that country; had visited every place of importance along the coast, and made extensive excursions in the interior. He had reduced to writing two of the native languages, and had more than ordinary facilities to become acquainted with the life of the people, their moral, social, civil, and religious condition, as well as their peculiar ideas and customs. It is not a book of travels, in which the writer is his own hero, but a treasury of facts drawn from all available sources, especially his own personal observation, thoroughly digested, well arranged, and written in a style so transparent that the reader seems to look on the scenes and occurrences which it describes. The only fault to be found with the book is that it has no index — a great defect in a volume so rich in rare and valuable facts. He gives an account of the ancient inhabitants of Africa, its principal divisions, ancient discoveries in that continent; its natural scenery, its rivers, mountains, seasons, and climate. He narrates at length the Portuguese discoveries and dominion there, and the early enterprises of the English, French, and Dutch. Then he describes in detail Senegambia, the two great rivers that combine to form its name, and its people, the Jalofs, Mundingoes, and Fulahs; the characteristics of each, and their relations to each other. So he goes over northern Guinea, comprising Sierra Leone, the grain coast, its different tribes, their peculiar customs, style of building, agriculture, social condition of the people, products of the country, their food, the domestic habits and dress of the women; the government, their deliberative assemblies, with specimens of their oratory. In like manner he describes the Ivory and Gold Coasts; Ashanti, its history, its wars with the British; the caboceers or nobles; the royal revenues; life in the palace;

[1] *Missionary Herald*, 1853, pp. 13-18. [2] Kingston's *Great African Travellers*.
[3] New York, 1856, 12mo, pp. 527.

gold mines; and human sacrifices, which last are perhaps without a parallel in the history of the world, and are made annually to the *manes* of the king's ancestors. The government is a most absolute and barbarous despotism, alike over noble and peasant; whoever opposes the will of the king, even in the most trivial matter, is guilty of high treason, and the spies of the king report every word that comes to their ears, so that no one is ever called to the palace without trembling lest some evil report about him has been carried to the king, or lest his blood be wanted to water some royal grave.

In describing the slave coast, our author gives an interesting account of the origin and history of Abbeokuta — literally "Understone," from the cavern where its founders found a hiding-place — and the attacks made on the place by the king of Dehomi, whose despotism and cruelties rival those of his neighbor in Ashanti. Wars were often waged solely to obtain human skulls to pave the court-yard and adorn the walls of the palace. The Abbeokutans were trained to resist one of his desperate assaults by an American missionary, who had learned war with our army in Mexico, and they attribute to him their success on that occasion, when they would have captured even the king himself had it not been for the frantic fury of his Amazons; for, while he had three thousand women in his harem, he had selected from the stronger women of the country five thousand for his army. These are so brave and loyal that he makes them his body-guard, and assigns a chief place to them in important battles. They are led by officers from among themselves; and when they would brand each other as cowards, they say, "You are a man."

Before leaving northern Guinea he describes their belief in God and in future retribution, and their system of fetich, which is inwrought into the whole texture of society. A stranger lands under a canopy of fetiches, meets them wherever he goes, at every cross-road or ford, at every large rock or tree, at the entrance of every village, over the door of every house, and around the neck of every one he meets.

Kindred to this is the universal belief in witchcraft. Every case of sickness, and especially every death, is believed to be caused by this; and no class, age, or sex is exempt from the dire suspicion awakened by such an event. Brothers and sisters, fathers, and even mothers are accused of the unnatural crime. The priesthood have ample scope here for malice or revenge, and are not slow to use it, though they themselves often fall under the same condemnation. The accused can be cleared from the charge only by submitting to the ordeal of the "red water," which in northern Guinea is prepared from a tree of the mimosa family, and in southern Guinea from a plant called nkazya. If this produces nausea and vomiting, the person is acquitted, and attains to greater honor than before. If, on the contrary, it occasions vertigo, he runs the risk of being killed on the spot by the fury of the mob. This superstition and the ordeal connected with it are constant sources of mischief, and the evil is hardly lessened by the liability of the accusers to undergo the same ordeal which has cleared the accused.

Passing on to southern Guinea, he describes the country, its climate and peoples; the difference between the Ethiopian and Nigritian races; European

settlements; trade, productions, food; the slave trade, and the cunning displayed by the natives in trade, of which he gives some specimens that would be most amusing did they not involve an utter lack of truth and honesty. He gives a clear statement of the difference between the people of the coast and the interior; their dwellings, furniture, social institutions, and government. It is a delight to read what he says of the respect shown by youth to old age, both in northern and southern Guinea. They esteem it one of the greatest crimes for the young to treat the aged with disrespect. They never come into the presence of aged persons without taking off their hats. In handing them a glass of water they do it on one knee, and address them as father or mother. Yet, before a king is inaugurated, every man, woman, child, and even slave, may say what he pleases to him, lecture him on his future duties, or remind him of past wrong-doing; and it would be deemed most unkingly to resent it, either then or afterwards.

No less cheering is the account he gives of African natural affection, blunted indeed by heathenism and the slave trade, but not eradicated, and needing only the Gospel to make them the most affectionate people on the earth. Among the Krûs — whose name he derives from the fact that more than any other tribe they were sought for to make up the *crews* of ships in those seas — robust men, whose faces indicated anything but gentleness, might be seen carrying infants in their brawny arms, and lavishing on them most tender care; but here, of course, the mother excels, and no one can doubt the love of the African for his mother. Her name, dead or alive, is ever on his lips. "Strike me," says a Mandingo proverb, "but don't curse my mother." She is the first one he thinks of when he wakes, and the last one he remembers when he retires to rest. To her he confides his secrets. For her alone does he care in sickness. She alone must prepare his food or his medicine. He flies to her in distress, for he knows that, though all the world is against him, she is steadfast in her love. It is a common saying that, if wife and mother are equally in peril, the mother must be saved, for no second person could ever take her place. Then, while the love of the father may be divided among several families, in that home of polygamy, and he must often decide quarrels against the children, the mother always befriends her own, and so secures their earliest, strongest love.

A missionary in eastern Africa met a native carrying a moldy and moth-eaten European coat, who, in answer to the question, "Where did you get it?" replied: "Ten years ago a white man gave it to me, who treated black men as his brothers; whose words were always gentle, and his actions always kind; who knew the way to every heart, and whom it was a privilege to serve." Do these words bear more decided testimony to the goodness of his old employer, Dr. Livingstone, or to the capacity of that grateful African to be transformed into the image of Christ?[1]

Then follows a particular account of several of the divisions of the Pongo country, where the author lived for many years on the Gaboon river, with a description of the Shekanis, Bakěles, and Pangwes, the kingdoms of Loango

[1] *Missionary Herald*, 1880, p. 290.

and Kongo, and the marked failure of Papal missions there and in Angola; with a chapter on natural history, and another on their superstitions, witchcraft, and secret societies, among both men and women.

One chapter in the book was written in England, on his way home, when the British people, discouraged with their long and apparently ineffectual efforts to suppress the slave trade, were about recalling their war vessels from the coast. It was published in one of their magazines, and showed so plainly the need of continuing the blockade only a little longer in order to success, that the whole matter was reconsidered, and the work, so long and so faithfully prosecuted, was carried out to its triumphant issue. He showed that the presence of their ships had abolished piracy in those waters; had restored peace to more than two thousand miles of sea-coast, and created a large and flourishing commerce in the natural productions of the country, besides protecting missions and every agency employed to promote the well-being of Africa; and therefore had accomplished results that more than compensated for all that it had cost.

The chapters on Sierra Leone and Liberia are very valuable repositories of facts concerning these countries, giving a vivid, yet terse account of what has been accomplished there for good, with their prospects for the future; while some suggestions are made about Liberia, in the line of giving more attention to the cultivation of the soil, and a less exclusive devotion to trade. The coffee grown there is of a very fine flavor, and, if only cared for as it ought to be, might equal any in the world. Already millions of plants are exported, to supersede in their own soil the famous coffee trees of Java. He mentions the need of more thoroughly educated missionaries, and their exclusive attention to missionary work; the importance of the people being trained to sustain their own schools and churches, and seeking to elevate the vast mass of heathenism within their borders — hints which, if carried out, would greatly promote the prosperity and usefulness of that republic.

The volume everywhere presents views of the people of Africa which could proceed only from one who had long lived among them, and had been an intelligent observer of their daily life. It is interesting to note the estimate such a writer forms of their capacity for improvement and self-government. He reminds us that the same variety of mental endowment we find at home is also to be expected there. While a general type of character may mark the people as a whole, he does not look for them to equal the Anglo-Saxon in energy and enterprise, though they will excel him in other traits equally commendable. Naturally social, generous, and confiding, when Christianized, unlike the African among us, they exemplify the beauty and consistency of their religion more than any other race. The obstacles to their elevation have arisen from their circumstances, and are not inherent in themselves. Compared with our own Indians, or South Sea Islanders, they appear well. No one can live among them and not note their energy and shrewdness, the cunning with which they "drive a bargain," the adroitness with which they practice on the credulity of white men, who are overreached even when most vigilant. They learn more about a white man in a few hours than he will of them in as many months.

They cultivate the soil, possess cattle, have fixed habitations, are skillful mechanics, and show both taste and aptitude for trade. In Africa they have none of that improvidence so noted among them here. They have little taste for logic or abstract discussion, but have excellent memories, vivid imaginations, and accurate observation of men and things. They have no written literature, though the Veys have invented an alphabet, itself no mean attainment. Mr. Wilson gives a page in this character, containing fifty-six different letters. Many of them are good practical botanists, mineralogists, and zoölogists, though without definite system. They abound in legends, fables, allegories, and proverbs, which they are fond of repeating.

Our missionaries have traversed the country north and east from Natal. Dr. Lindley and two associates commenced a station nearly one thousand miles north of Cape Town, but wars compelled them to journey circuitously thirteen hundred miles to Port Natal. Rev. Messrs. J. Tyler and S. B. Stone, in urging the establishment of a new station one hundred and fifty miles west of Sofala, one thousand miles north of Natal, sent home a manuscript map of the region they proposed to occupy, with all the geographical facts known concerning it.

In eastern Africa, Dr. Krapf and his associates at New Rabbay, near Mombas, have made important discoveries. With Rev. J. Rebman he traveled on foot, at different times, nine thousand miles, over an unknown region, extending five degrees south from the equator. On one of these journeys they discovered the snow-crowned Kilima Njaro, eighteen thousand five hundred feet high; and when English geographers denied its existence, they discovered a similar mountain,[1] and heard of a great inland sea beyond. This, again, led to the sending out of Speke and Grant, who discovered Victoria Nyanza and Tanganyîka. Thus a question mooted from the days of Ptolemy was settled, and the true sources of the Nile made known — a result, says Colton, the cartographer, "that would not probably have been attained for years but for these missionaries." They were sent out by the Church Missionary Society.

It would be a crime to close this account of missionary contributions to our geographical knowledge of Africa without alluding to the valuable series of papers now appearing in the *Missionary Herald*, from the pen of Dr. J. O. Means. Not only do they give the cream of all that is now known of that continent, but they draw a most inspiring picture of its capabilities when relieved from the incubus that has hitherto hindered its development. With actual facts for a basis, and the analogy of the advance of other lands for a guide, he ventures into the future, and draws a picture of Africa as she shall be, that thrills every lover of his race. Nor is it the baseless fabric of a vision, but an anticipation of the near future, which the reality may soon show fell far short of the truth. Take, for example, his terse estimate of the future business of Africa.[2] The annual business of Great Britain is at the rate of $100 for each of her population; that of France is $50 for each, and of our own country about $30. Taking the world over, the average is about $11 for each person; but the total annual business of Africa now is at the rate of only $1.10

[1] Kenia.

[2] *Missionary Herald*, 1880, p. 302.

for each one of her two hundred millions. Now let that only come up, as it soon must, to the general average, and what a change does that imply in the condition of that vast and naturally productive continent! No one can form a correct idea of the present and prospective condition of Africa who has not read those papers. It would seem as though the Lord had been preparing their author for this work from the period — many years ago — when he was an officer on board of one of our national vessels on that coast, down to the time when they issued from his pen.

In this rapid review of our missions, we have found them all adding to our geographical knowledge. In this alone we have an ample return for all their cost. If the contribution of our United States Exploring Expedition to geographical science justified its outlay of one and a half million dollars; if Polar expeditions are still sent forth at very great cost, though their results have been less satisfactory, these contributions to sound learning by our own missionaries demand a generous appreciation. Every station is not only a center of observation, but also a starting-point for explorers to regions beyond. The friendship of the natives, secured by missionaries, enables them to obtain more reliable guides, and make better preparations for their work. There is scarcely an exploration in any land, says Mr. Colton, the cartographer, that does not thus acknowledge its indebtedness to our missionaries.

IV.

GEOLOGY.

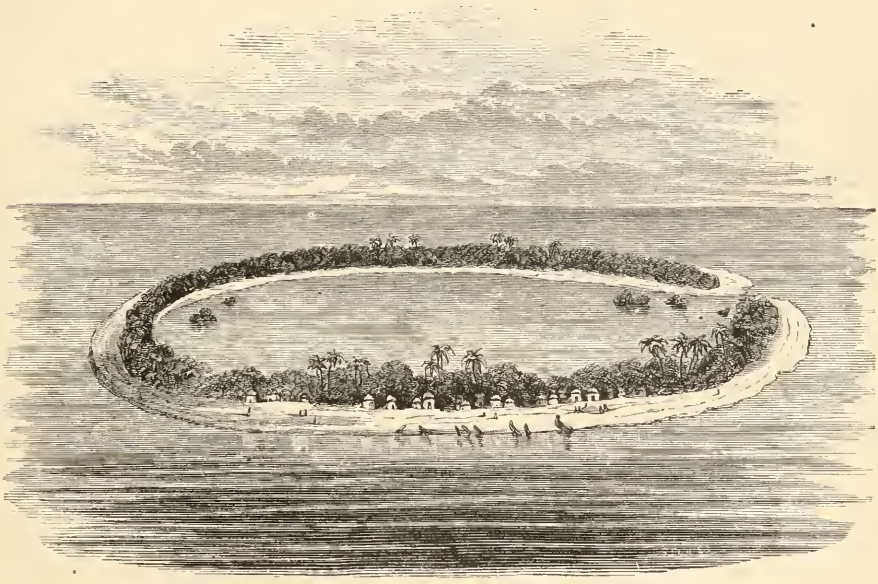
Our missionaries, widely scattered over the globe, have good opportunities to study its geological formation, and they have not been remiss in improving them. Attention began to be devoted to this science at a very early period in the history of the Board. In the month of November, 1819, Rev. Levi Parsons, in the cabin of the vessel that conveyed him from Boston to Smyrna, studied Prof. Cleaveland's treatise on mineralogy and geology, as well as French and Italian, and in February, 1820, sent to Prof. Hall, in Middlebury College, a box of minerals from Smyrna, among them a specimen of Malta stone, a fragment broken off from St. Paul's cave in that island; also specimens from the castle of Smyrna; a specimen from the amphitheater where Polycarp suffered martyrdom, a specimen from ruins near Diana's Bath, two miles from Smyrna, and a specimen of the mortar of the amphitheater. It may seem strange that he should send this last, but the writer has seen old mortar in Syria so tenacious that quarriers who resorted to ancient ruins for materials to use in new buildings often broke the stones themselves in spite of all their efforts to extract them whole, for the mortar along the lines of junction was stronger than the original structure of the solid limestone; and it is of some interest to examine the composition of mortar that retains such tenacity after the lapse of so many ages.[1]

The greater part of Micronesia consists of low coral islands, built up by the labors of minute animals belonging to the class of the *actinozoa*, which have the power of secreting hard structures of the nature of a skeleton. They are also called *coralligenous zoöphytes*. They belong to the radiated animals, and to the orders of the *zoantharia*, *rugosa*, and *alcyonaria*. They live and labor at a depth not exceeding twenty-five fathoms, or one hundred and fifty feet, and are confined to seas where the temperature does not sink below sixty-six degrees Fahrenheit — or not more than eighteen hundred miles on either side of the equator; and their headquarters are in the central Pacific. They build up land in three forms: fringing and barrier reefs, and atolls. Fringing reefs line the shore, and have no great depth of water between them and the land. Barrier reefs are formed at a greater distance, and the water on both sides of them is deep, but deepest on the outside. Atolls — and this is the form most common in Micronesia — are in the shape of a ring enclosing a

[1] *Memoir of Rev. Levi Parsons*, pp. 269, 289–291.

lagoon. These central lakes are generally connected with the ocean by one or more channels on the leeward side of the island. In the largest of these enclosed lakes the navies of the world might ride at anchor, but the ring of land is so narrow that one can walk across in a few minutes. The soil is quite poor. There are no springs, and of course no hills, few land-birds or flowers. Flocks and herds could not survive long on them, but multitudes of men find there a home.

Others of these islands are volcanic; that is, they are the result of the action of volcanoes, bringing up material from below the surface, and piling it up in the form of mountains, from whence lava, ashes, and cinders flow down on all sides. These islands are very diversified in surface, and though in some places very rough and bare, yet where the lava has had time to distintegrate into soil, and is watered either by rain or irrigation, it becomes exceedingly fertile, and



LAGOON ISLAND IN MICRONESIA.

produces an abundance of trees and plants. Tropical fruits and vegetables flourish in it with great luxuriance.

The parish of Rev. Titus Coan extends fifty miles along the eastern shore of Hawaii, and is very picturesque. Within a distance of thirty-five miles sixty-three streams rush headlong to the sea. Fourteen of their ravines are from two hundred to one thousand feet in depth, and the rest smaller. The perpendicular sides of many can be ascended or descended only on the hands and knees.[1]

He has given some vivid pictures of volcanic eruptions on these islands. In 1840, the crater of Kilauea had gradually filled up four hundred feet, leaving a depth of only nine hun-

[1] *Missionary Herald*, 1837, p. 36.

dred; till, near the close of May, its whole area raged like the ocean in a storm, and waves of liquid fire dashed with such force against its rocky sides as to shake the whole mountain and hurl huge masses of rock from near the top into the fiery gulf below. On Sabbath, May 31, worship in adjacent villages was interrupted. Fiery outbreaks grew more frequent and terrible, but the molten mass seemed to pause as if uncertain which way to turn. All were in consternation, for none knew at what point it would plunge down the descent of four thousand feet, or what ruin would mark its path. On Monday it began to flow northeast, and on Wednesday evening it reached the sea, at an average rate of half a mile an hour. Sometimes it rushed on at ten times that speed, and then stopped to fill up valleys and break away the hills that stood in its way. The lava broke out in a forest at the bottom of an old crater, four hundred feet deep, eight miles east from Kilauea, which it had reached by a very deep subterranean gallery, whose position could be traced by the fissures on the surface, and the escaping steam and gas. Disappearing here for a mile or two, it gushes up again, filling an area of fifty acres. A third time it passes underground three miles, and reappears in another wooded crater, consuming the trees, and partly filling the basin. Once more it disappears, fissures from six inches to twelve feet wide marking its course. Trees, split from the bottom almost to the top, form gothic arches across some of these, and then some seven miles away it breaks forth, sweeping forest, field, and hamlet before it, till it leaps from a cliff, fifty feet high, one unbroken sheet of fire, into the sea, with a thousand unearthly sounds. Picture Niagara, as red as gore, thus plunging into the ocean — two gigantic forces, fire and water, in dire collision — the atmosphere not only filled with steam and gases, but the lava itself shivered into millions of minute particles, thrown back into the air, falling in showers over the region. A new cape, with white sandy beach, extended a quarter of a mile into the sea, and three hills rose in the water from two to three hundred feet in height.

For three weeks this river flowed with small abatement. The fishes in the vicinity were killed, and the ocean heated to a distance of twenty miles. Its entire length was forty miles, with a breadth from one to four miles, conforming itself to the surface, and it was half a mile in width where it fell into the sea. Its depth varied from ten to two hundred feet; and all that time night was turned into day on eastern Hawaii, while its glare was seen on the western shore. It was visible, also, one hundred miles at sea, and at the distance of forty miles fine print could be read at midnight. Hills melted down like wax, deep ravines filled up, and majestic forests disappeared like feathers in the flames. In some places the stream separated and then reunited, leaving islands between seared by the heat. Sometimes large trees were enclosed by the lava, and their trunks consumed, leaving holes from ten to forty feet deep where they had been, each like the bore of a cannon. While the stream was flowing, men could approach very near to windward; but to the leeward no one could come within many miles for the smoke and deadly gases, while showers of fire destroyed all vegetable life. Extensive tracts of land were undermined and floated off like rafts on the fiery flood. Sometimes the lava, obstructed in its subterranean course, swelled the surface into dome-like hills; and one man, suddenly raised with the ground on which he stood, had barely time to flee before his standing-place became a fountain of fire.[1]

January 10, 1843, an eruption began on Mauna Loa, thirteen thousand feet above the sea, and thirty miles from Hilo. After being kept awake many nights, watching its varying development — for the eruption was in plain sight from his bed-chamber, and he could see the rising of lofty pillars of fire, and the fearful flow of the molten sea — on the 6th of March Mr. Coan set out to visit it with Mr. Paris. The first day they ascended the almost dry bed of a river, leaping from rock to rock, crossing and recrossing as they could find a way round the deep pools, along the steep cliffs, and over the masses of drift-wood, composed sometimes of entire trees torn up by the roots and flung in wild confusion across the gorges. The second day still found him and his attendants in the solitary forest, under the frowning battlements of dark lava, deafened by the mountain torrent, or soothed by the song of birds that filled every shrub and tree with living joy. The third day, at noon, they emerged from the ravine, and found the mass of Mauna Kea rising high before them. At its base was an open country, occupied by herds of wild cattle. They now crossed a rolling plateau, dotted with orchard-like clumps of

[1] *Missionary Herald*, 1841, pp. 283–285.

trees to the southwest, with the peaks of Mauna Kea on the right, and at evening came in sight of Mauna Loa, and camped under an ancient wooded crater, four hundred feet high. Here they had a splendid view of the highest crater, twenty-five miles away, and of the flood of lava that had poured down the northern side of the mountain, about five miles off. They were now about seven thousand feet above the sea, and a thunder-storm raged below them, while he saw hail for the first time since his arrival in the islands. As darkness set in, the lurid fires gleamed from the foot of Mauna Kea all along the intervening plain, and up to the snow-crowned peak of Mauna Loa, like countless furnaces flashing through the gloom. In the morning, both mountains were mantled with snow. Thursday morning, they pitched their tent near an old tree-covered crater, surrounded by a vast field of bare, jagged scoria, deposited by former eruptions, which left the hill like an island in the sea. Leaving the most of their attendants to collect fuel and prepare the camp, they set off for the nearest flow of lava, two miles distant, into which they thrust their staves, and took out some of the viscid mass, to be carried off as a memento. The day was spent on the great plain between the two mountains, examining the products of the eruption, some cooled and some yet in igneous fusion. The scoriform masses lay in ridges from thirty to sixty feet high, forming jagged and almost impassable barriers. Between these were broad streams of slag, solid on the top, like rivers covered with ice. This was smooth, and of a lustrous black, revealing in places the fiery river that still flowed beneath, sending up gory jets through cracks and seams. They were amazed at the immense area of this surface. One broad stream had gone west toward Kona, another to the base of Mauna Kea on the north, dividing there into two, one flowing northwest toward Waimea, and the other northeast toward Hilo. Together they would form a river six miles broad, the longest being nearly thirty miles in length. They were still both advancing slowly toward the sea. Weary, but intensely interested, Mr. Coan returned to the tent to spend another night "in a sea of electricity."

Next morning early, they set out for the crater, twenty miles distant, committing some extra wraps and a little food and water to two strong natives. These, however, were so impeded by their loads and the sharp, jagged scoria, that they could only advance at the rate of a mile an hour; and so all baggage was left, except some biscuit in their pockets, and their cloaks on the shoulders of the guides. Soon they moved more rapidly over compact, smooth lava, hoping to reach the summit and return the same day, as a night in that high region of cold might be fatal. The path lay now on old deposits, now on new; here on broad fields of smooth, shining lava, and there across ragged scoria full of spurs. Ten o'clock found them at the foot of the cone, and the ascent became steeper. At noon their guides were out of sight in the rear, and the rarity of the air compelled frequent stops for breath. Soon they reached an opening of some sixty feet by thirty, and, looking down, at the depth of fifty feet they saw a vast subterranean tunnel with smooth vitrified sides, and in this, with headlong speed, a river of fire rushed down the steep declivity. The sight of this pyroduct was startling. It made them dizzy to look down, but one glance at it would have repaid a journey of a thousand miles. For hours, without knowing it, they had traveled over this fiery flood. They found similar openings afterwards; and large stones thrown down, instead of sinking, were borne out of sight upon its surface. Sometimes irregularities on the sides of the tunnel projected masses of melted matter with terrible noise and startling force.

They did not reach the summit till three o'clock, having waded through snow for the last three miles. Here they found two immense craters of vast depth, in terrific action; but they had to hurry away without minute investigation, utterly exhausted. Night found them hardly able to move, and their camp still ten miles away. A fog now shut out all things, even the volcanic fires; but after an hour this dispersed, and they reached the camp at eleven o'clock.[1]

At half past three on the morning of February 17, 1852, a small beacon light again appeared on the summit of Mauna Loa; at first a star, it soon became a moon, and sailors on watch said, "What is that? Is the moon rising in the west?" In fifteen minutes, a flood of fire burst forth, and again traversed the northern slope of the mountain. Streams of light flooded the earth and filled the firmament, illuminating the chambers of distant Hilo. The splendor was surpassing, but it lasted only twenty-four hours. February 20, another eruption burst out

[1] *Missionary Herald*, 1843, p. 463; do., 1844, pp. 44-47.

half way down the mountain, facing Hilo, and soon the molten flood headed directly for the town. Ere long it reached the forest at its base, having traversed a distance of twenty miles. A canopy of cloud and smoke hung over the mountain, murky, blue, white, purple, and scarlet, as the light played on it from below. At times it assumed the form of a mountain inverted over the other, peak to peak; then, curving gracefully, it swept off like the tail of a comet, further than eye could follow. Ashes and cinders fell on the decks of ships approaching the islands. Vitrified filaments, called "Pele's hair" by the natives, fell on the roofs and in the streets, and the whole atmosphere looked pale and sallow. Mr. Coan again started for the crater February 23, with Dr. Wetmore and four natives. Their way led through a dense forest, thirty miles broad, so tangled with vines, ferns, and brambles that no animal penetrated it, and they could only advance about a mile an hour. Many trees were of immense size, and one fern measured nine feet in circumference. At noon of the second day they could see over a part of the surrounding country, and found the lava only six miles away, and advancing steadily toward them. Here Dr. Wetmore returned, but Mr. Coan kept on. At the close of the day he camped on a hill, and at half past three in the afternoon of the next day reached the crater and stood alone in the light of its fires. He says:

"It was a moment of unutterable interest. I seemed to stand before the burning throne of God. I was ten thousand feet above the sea, in a solitude untrodden by man or beast, amid a silence unbroken by created voice, almost blinded by the brightness, deafened by the clangor, and petrified by the terrific nature of the scene." The heat was too intense to approach the crater within one hundred and fifty feet from the windward, and probably it would have been unsafe two miles to the leeward. The eruption had begun on the summit, but the immense pressure of the pent-up mass broke through the side of the crater, rending the mountain from the summit to the point of exit, three thousand feet below, where the fiery flood was thrown from one to five hundred feet in the air. A rim more than a hundred feet high surrounded the vent, like a truncated cone, half a mile in circumference at the base, and tapering to the top. From this horrid throat a continuous column of red-hot and white-hot matter rushed with deafening noise, and a force that threatened to rend the mountain. The sound varied; now a premonitory rumbling, and then an explosion like a broadside at sea. Sometimes it resembled the roar of ten thousand furnaces; sometimes it was like the dash of the waves in a storm on the rocks, and again like thunder. The eruption was continuous, and the force such as to shiver the column into millions of fragments of all shapes and sizes, some of them falling back again into the crater. Every particle shone most brilliantly, and all kinds of geometrical figures were constantly formed and dissolved. No pen or pencil could set forth its beauty or terrible sublimity.

As evening came on Mr. Coan retired about a mile, and all night long saw the lava at a white heat ascend continually in the form of pillars, pyramids, cones, towers, spires, and scimetars, while the descending showers poured incessantly fragments large enough to sink the largest ship. A large opening in the lower side of the rim allowed the melted mass to flow off at the rate of ten miles an hour, in a stream that the eye could trace for more than twenty miles, till it disappeared from sight.[1]

November, 1851, Mr. Coan found smoke still issuing from crevices in the lava of 1840, and some fissures too hot for the hand to be held over them.[2] It illustrates the felicities of traveling in the islands, that, on this tour, going across the mountains from Hilo to Kealakomo, he was two days passing a dreary desert, without inhabitants; and, though the rain fell almost incessantly, he found no shelter, not even a dry log or stone on which to rest. Three days later, in returning along the shore to Kalapana, he walked over black lava, glowing in a tropical sun, without water or even "the shadow of a great rock" to refresh him. Yet in the same region, in 1841, he had to cross raging streams once in half a mile for thirty miles, running at the rate of twenty miles an hour, and abounding in falls from ten to one hundred and fifty feet perpendicular. Across some he swam, landing far below the point where he entered, and others could only be crossed by the aid of a rope, which had to be grasped with might and main to prevent being swept away by the stream that dashed over him. At one place it was three hours before he found a place where he could use even a rope with any hope of safety.[3]

[1] *Missionary Herald*, 1852, pp. 225-227.

[2] Do., p. 162.

[3] Do., 1842, p. 157.

On the 27th of March, 1868, a series of earthquakes again alarmed the people of Kona and Kau. Next day eruptions of steam and fire were visible at four points on Mauna Loa. The streams of lava rushed down the mountain in divergent lines, the largest towards Kahuku in Kau. Shocks more vigorous and frequent were now felt all round the island. The fiery mass surged against the walls of the great caldron, throwing down avalanches of rocks, and bursting through into a lateral crater. The stone church at Kahuku and the buildings of foreign residents there were now shaken down. Suddenly the smoke and fire on the mountain disappeared. All eyes were turned to it, and the inquiry ran along, "Where is the eruption?" The rapid jars and tremblings of the earth told how it was forcing its way underground. Till April 2, the earth hardly rested between the shocks. At the quietest point of the intervals the quivering of the island was like the trembling of a ship under the firing of a broadside. On that day there was a shock such as the traditions of Hawaii had never recorded. The earth rose and sank like the ocean in a storm; trees swayed to and fro; stone walls fell flat; houses reeled — some nearly slid from their foundations, and a few fell; furniture was moved or thrown down, and all houses were filled with débris; chimneys fell over; ovens were broken; sugar boilers and cooling vats nearly emptied. The shock was terrific. The earth opened in fissures from one inch to two feet in width. Avalanches of rocks and earth poured from the cliffs along the shore; streams ran mud; the sea swept over the low shore, and consternation reigned everywhere. The noise of the cracking earth, falling stones, and crashing timber was bewildering. The acids and drugs in an apothecary's shop were compounded in a way not prescribed in the *Pharmacopœia*, and threatening ignition. One woman was killed by the falling rocks, and others escaped as by a miracle. Some children, playing under a ledge, huddled together like frightened sheep, and prayed, the rocks falling all around and leaving them unharmed. Many left their houses and camped out; some did not sleep in their houses for many days. But if things were bad at Hilo, at Kau all was wreck and ruin. At Kapapala and Keaina a mass of rocks, mud, and earth, two or three miles long and as many in width, suddenly buried a whole village with all its cattle. It was as sudden as a shot; and there was no escape. The marvel is, that the mass was cold. The noise of the explosion and the crashing of the strata beneath was as if the rocky ribs and pillars of creation were being broken up. Looking seaward, the stone church at Punalau, six miles off, was prostrated, and a tidal wave some twenty feet high swept off the débris of that and the houses all along the coast, into the sea. Thus, in a moment, that shore was desolated. The statistics of the loss of life could not be obtained. Some were buried alive, and others suffocated by the volcanic gases. A great stream of lava flowed into the sea near Waiahinu, filling all that region with a glare of light; and Kilauea sunk down hundreds of feet, looking like a vast pit of blackened ruins. The melted lava has flowed off, and wide fissures yawn along its upper rim. Mr. Coan's description, written April 9, closes thus:[1] "Our earthquakes still continue, but they are not severe. As the lava flows above ground in Kau, we hope relief is near. Our trust is in Him 'who looketh on the earth and it trembleth; who toucheth the hills and they smoke.'" As late as 1879, Mr. Coan communicated to the *American Journal of Science and Art* an account of "a recent silent discharge of Kilauea,"[2] very different from the one described above.

Rev. Lewis Grout speaks of the terraced character of Zulu-Land, from the coast all the way up to the Kwahlamba, or Drakensberg mountains, six thousand feet above the sea. The coast is a beautifully variegated strip of country, ten or fifteen miles wide. The underlying rock is mainly granite, though here and there ledges of sandstone and trap are washed by the waves. One thousand feet above this lies another shelf of about the same width, and one thousand feet more brings us to the midland terrace, about twenty miles in width, and, like the rest, very diversified in surface. Fifty miles from the sea we find still another, three or four thousand feet above the sea, stretching away for fifty or one hundred miles to the Kwahlamba. From the summit of this

[1] *Missionary Herald*, 1868, pp. 219–221.

[2] *American Journal of Science and Art*, p. 227.

last, which, like the mountain at the cape, is not a peak, but an immense table surface, the land slopes gradually down, for two thousand miles, to the Atlantic coast, requiring all that distance to get down again to the same level which, on the eastern coast, is only one hundred and fifty miles distant.

The mountain behind Maritzburg, the capital of Zulu-Land, is a few hundred feet lower than Table Mountain. It is a quadrangular block of nearly equal sides, with a pasture-clothed top of four square miles, or between two thousand and three thousand acres, separated from the surrounding surface by bodily upheaval, leaving sheer precipices of old sandstone, without fossils, all around, and accessible only at one point. From this summit one looks down on the irregular surfaces of the terraces below, that here appear level, except where the short, rapid rivers that break their way through to the shore seem to have washed down the originally level surface into all sorts of shapes, leaving here and there a flat portion to show what had been there before. Lower down, a more recent and finer-grained sandstone occurs, containing impressions of vegetable remains. The trap rock is of various ages, some closely associated with the granite, and some newer than the more recent sandstone. The older is generally amygdaloidal, with small fragments of the more ancient rock embedded in it like almonds in paste. The newer trap rocks vary in compactness, and therefore disintegrate more readily, so that boulders of trap are often strewn very thickly over the surface. The granite hills are low and smoothly rounded, in contrast with the truncated cones of the trap rocks.[1]

Dr. W. M. Thomson describes an earthquake that occurred in Syria, January 1, 1837.[2] In Beirût it took place at 4.30 P.M., unheralded by anything remarkable; only a pale haze obscured the sun, and there was an oppressive calm. The mission church was at the communion table, when suddenly the house began to shake and the floor to rise and fall; the congregation rushed out unharmed, and the building was cracked from top to bottom. In the city a few houses were seriously shattered, and some near the river thrown down. During the week news of disaster began to come in, and in Safed some said that not one in a hundred had escaped, and others, more correctly, that six thousand had perished out of a population of ten thousand. A collection was taken up in the city, and Dr. Thomson and Rev. Mr. Calman were sent to oversee its distribution among the survivors. On the 13th, seven hours' riding brought them to Neby Yoonas, and next morning, leaving early, they soon entered Sidon. Here they took with them the consular agent and his two sons to assist them. At 10 P.M. they reached Tyre, cold and hungry, to lie down without a fire, in a house shattered by the earthquake. Some of the streets were impassable with the débris of fallen houses. At Sidon over seventy houses had been injured, and Tyre was nearly ruined; even the best houses needed to be rebuilt. Twelve persons were killed here, and thirty wounded; but things were reported so much worse in Safed, they hurried away on the 15th, though it was the Sabbath, and spent the night at Kanah, where the earth still continued to tremble. On the 17th they reached Rumaish, to find it in ruins, and the people living in booths made of old boards, mats, brush, and anything that could afford shelter from cold and rain. Thirty people had been killed in this small village, and more would have shared their fate had they not been in the church, which was not seriously injured. After visiting the wounded, and giving them help, they pushed on to Bureyam, where fourteen had been killed and many wounded. They stopped for the night at Jish, an hour beyond; here not a house remained, and one hundred and thirty-five persons were buried under the ruins of the church; only the priest escaped. The entire vaulted roof dropped instantly, and escape was impossible. Fourteen bodies still lay unburied,

[1] *Zulu-Land*, pp. 255–269.

[2] *Missionary Herald*, 1837, pp. 433–442. *Land and Book*, Vol. I, pp. 428–433.

and two hundred and thirty-five in all had perished. The survivors, sixty in number, had gone elsewhere, leaving their sheikh, with five others, to dig out the property from the ruins, and bury the dead. The atmosphere about the church was unendurable.

The hill here is of volcanic origin, and the houses had been built of volcanic stone. As the pigeons here were left without owners, the sheikh authorized Dr. Thomson's servants to shoot some of them for the evening meal. A large rent in the mountain, to the east of the village, about a foot wide and fifty feet in length, was gradually closing up. The road now lay over a plain strewed with volcanic rock. A small lake occupied an extinct crater. They passed Kudditha, nearly destroyed, and, in the afternoon, Ain Zeitun, in utter ruin. Just at the ascent of the Mountain of Safed, they met a merchant of Sidon, returning home with his widowed sister. Her husband had been buried up to the neck by his fallen house, and in that pitiable condition remained several days, begging for help, till he died without it. During the ascent, several rents appeared in the earth and rocks. But all this was forgotten when they reached the city. No language could overstate the ruin. Of the Jewish half, which held four thousand inhabitants when Dr. Thomson was there before, not one house remained. The town was built on a side-hill so steep that the roof of one house formed the street for the next above; and when the highest fell on the one below, and these together on the third, and so on to the bottom, no wonder the inhabitants of the lower streets were buried beyond the reach of help. Though some were rescued even seven days after the shock, still alive, a larger number were never reached at all, or only lifeless bodies rewarded the labor. One found his wife dead, and the child, with the breast of the dead mother yet in its mouth, had also died of hunger. Parents heard their little children calling on father and mother in fainter tones, till the feeble cry ceased altogether before it was possible to reach them. What a night that was when, in the darkness, three fifths of the population lay under the ruins, and the shrieks and groans of the wounded mocked the inability of their friends to help them! the earth trembling the while, as though shuddering at the ruin she had wrought. As far as the eye could reach, nothing was even now to be seen but one vast, mingled wreck of stone and timber, furniture and clothing, in horrible confusion; men everywhere at work, worn-out and woe-begone, in search of the mangled bodies of friends, while here and there companies of two and three bear away a dreadful mass of corruption to the grave. Of the wretched survivors, some were weeping, others laughing, as though their power to weep was exhausted. In one place, an old man sat alone on the site of his once crowded home. In another, a child was at play, too young to know that it was left alone. Kind words unsealed the fountain of tears in some, others seemed dazed with sorrow; parents were childless, and children were new-made orphans, and many remained the sole survivors of large households. Most had extemporized such shelters as were described at Rumaish, and some, unable to move, lay under tottering walls, that might at any moment fall over and end their misery.

As soon as possible the party began their labors, but they soon found that the first thing to do was to extemporize a hospital. Eight lay in an old vault, accessible only by a hole in the roof, the air tainted beyond endurance. Others, bruised and swollen out of shape, and partly mortified, had no shelter at all. On the 19th the hospital was ready; yet, even then they had, in some cases, to carry the wounded to it with their own hands, or pay their relatives exorbitant prices for the service! In one case, a woman lay on the ground, with a number of wounds, all in a state of mortification. One foot had dropped off, and the bones of the leg were bare. There was nothing to do for her but to relieve pain, as far as possible, till the end came, which was not far off. Even before the shelter was ready, some of the wounded were brought and laid down, waiting for its completion. Half of the Christian population had perished, and the survivors occupied one great tent. Here, too, were wounded and orphans needing attention. Even while Dr. Thomson was there, the shocks continued. On the 19th, while nailing boards on the roof of the building, a cloud of dust rose from the ruins all round, and the people rushed out with loud cries, beating their breasts and tearing their garments in despair. The workmen, too, threw down their tools and fled. One jerk was so sudden and violent as to affect Dr. Thomson like an electric shock. After some days, leaving his associates to care for the sufferers at Safed, Dr. Thomson passed down to Tiberias, where the destruction was not so great. Only seven hundred perished out of two thousand five hundred;

while at Safed four thousand Jews and Christians were killed, and one thousand Moslems. Yet even here the only physician, who is wealthy, had his wife and children killed at his feet, and his own leg broken below the knee. He was held fast in that condition two days, begging for some one to come and set him free. At length he offered three hundred dollars, but in vain. When the flies got to his wound, in despair he sought to end his life and suffering together; but he did not succeed, and at length found relief and healing. Kefr Kenna sustained no injury; Nazareth, a little. The upper story of the house of the Nazarene who had since been helping Dr. Thomson for five days fell down, but, providentially, no one was hurt. The lower part, built very strong, stood firm, and here Dr. Thomson was entertained, with many tons of rock and earth piled on the floor above. Only five were killed here, though a little more would have brought down the Latin convent on the heads of the monks. Workmen were now busy on it repairing damages.

V.

METEOROLOGY.

TURKEY.

THE missionaries of the American Board of Commissioners for Foreign Missions early gave attention to observations of the climate in their fields of labor. February 1st, 1825, Rev. W. Goodell, then in Beirût, Syria, in answer to a letter of inquiry from Rev. R. Anderson, gave some account of the climate in that place. He had kept a regular journal of the temperature for eight months, and reported the highest temperature in January 64°; lowest, 49°;[1] average at 9 A.M., 54.5°, and at 3 P.M., 56.5°. On ten days the wind was southwest, accompanied by rain, and five days without rain. One day it was southeast, and two days northwest; eight days it was northeast, two days it was north, one day west, and two north-northeast. The temperature, winds, and rain were much the same in December, 1824, and in both months there was more cold, more northeast wind, and less rain, than in the same months the year before. That year thunder-storms were frequent and sometimes terrific, but this year they were rare. The rain came almost invariably from the southwest, not in a steady storm, but in showers that poured down torrents. The southwest winds were the most pleasant. Northeast and north winds were dry and cold. Though within twenty or thirty miles of a New England winter, he was sitting without a fire, still, after a few hours of study, needing to walk a little to keep warm. It was characteristic of him to add, "We are reminded of Him who walked in the temple in Solomon's porch, for it was winter." The summer was not oppressively hot. It was often 85° at 9 A.M., and 87° at 3 P.M.; and one day it rose to 90°. There was usually a refreshing breeze from the southwest, and, by eating fruit and abstaining from hearty food, he was able to study successfully the entire summer. He closes his letter thus: "The hail is now rattling on my windows. The birds of the air have just sought refuge in my study; and though I have on a surtout, and a plaid cloak over that, with my hat on my head, yet I have barely warmth enough to assure you that I am truly and always yours, W. G."

March 1st, he writes that the average temperature for February was nearly 49° at 9 A.M., and 51° at 3 P.M.; the lowest 35°, and the highest 63°. On the coldest morning he found ice nearly half an inch thick. One day there was snow, with a northeast wind, and another, rain, hail, and snow on the

[1] In these pages the temperature is measured always on the scale of Fahrenheit, and never on that of Reaumur, or Centigrade.

ground most of the day, with the same wind. On eight days there was rain with a southwest wind; five days, a little rain, with the same wind; and on three days there was a little rain, with both northeast and southwest winds, and one day with only a northeast wind. Two days the wind was north and dry. Two days, southwest without rain, and four days northeast without rain. Once it was northeast and southwest and dry. Part of the month the weather was colder than it had been for half a century. Many persons thirty years of age had never seen ice before, and could not tell what it was. Some called it glass, and others insisted that it was a new kind of snow, but how it got into their houses they could not imagine. There was a good deal of suffering; the cold stone walls were damp; the flat roofs leaked, and there was no fire or place for a fire in the houses. Mr. Goodell says: "They were wet with the showers of the mountain, and embraced the rock for want of shelter." We wonder that we acknowledge no more the hand of that great and good Being who "hath set all the borders of the earth; who hath made summer and winter;" "who preserveth our lives from destruction, and crowneth us with loving kindness and tender mercy."

March 31st he wrote that the lowest temperature was 48° during the month, and the highest 64°. The average for 9 A.M. was 56°, and for 3 P.M. 58°. There was rain on two days with a south-southwest wind, and on three days with a southwest wind; a little rain on five days with a southwest wind. The same wind another day brought rain and hail. Twice a northeast wind brought a little rain, and once a northwest wind did the same. Eight dry days the wind was northeast, and five of them southwest. Once a north wind, again a northwest, and at another time a north-northeast wind, were equally dry. The quantity of rain was not large. March 9th, six water-spouts were in sight, from the roof, out at sea, moving to the northeast, and on the 20th there was severe thunder and hail, which broke a window before Mr. Goodell could close the shutters. The extremes for the three months were 35° and 64°, and the mean at 9 A.M., 52°, and at 3 P.M., 55°. Half of the ninety days there was more or less rain, and on two of them it snowed and hailed, and almost all the rain came with a southwest wind.[1] On Mount Lebanon, which was in plain sight from the house, the snow of winter continued visible, not only through the spring, but even beyond the middle of July, while the thermometer set out in the sand rose to 120°. Arab poets say that Lebanon bears winter on his head, spring on his shoulders, and autumn in his bosom, while summer lies sleeping at his feet.

Mr. Goodell spoke of Beirût as a healthy place, compared with other localities in the vicinity, and especially with the island of Cyprus. He also gave some rules for preserving health which might not prove altogether without profit to-day. Among these were, to wear flannel under-clothing all the year round, to avoid sudden exposure to cold air while perspiring, and to adhere rigorously to a simple vegetable diet during the heat of summer.

In 1826 he reported the spring as unusually backward, and the following is an abstract of his meteorological observations for April, May, June, and July, and also for October and November of that year:

[1] *Missionary Herald*, 1825, pp. 345–348.

Months.	Highest.		Lowest.		Range.		General Range.				Mean.		Wind.	Weather.
	9 A.M.	3 P.M.	9 A.M.	3 P.M.	9 A.M.	3 P.M.	9 A.M.		3 P.M.		9 A.M.	3 P.M.		
April	68°	70°	54°	58°	14°	12°	56°	64°	61°	68°	61°	63°	S.W.[1]	Rain 7 days
May	76°	79°	66°	71°	10°	8°	70°	72°	73°	76°	71°	74°	S.W.[1]	" 4 "
June	82°	84°	75°	79°	8°	5°	76°	80°	80°	83°	78°	81°	S.W.[1]	" 1 "
July	83°	86°	80°	83°	3°	3°	80°	81°	83°	85°	81°	84°	S.W.	" 0 "
Results	83°	86°	54°	58°	29°	28°	56°	81°	61°	85°	72°	75°	S.W.[1]	" 12 "[2]
October	79°	84°	70°	74°	9°	10°	74°	78°	76°	81°	74°	77°	S.W. and N.E.	" 3 "
Nov.	78°	79°	64°	66°	14°	18°	66°	69°	68°	72°	67°	71°	S.W.[1]	" 5 "
Results	79°	84°	64°	66°	15°	18°	66°	78°	68°	81°	70°	74°	S.W. and N.E.	" 8 "

[1] Occasionally northeast for several days; sometimes northwest.
[2] Often small in amount, generally from the southwest.
Snow was in sight on Lebanon till July 28.

—*Missionary Herald*, 1826, pp. 183–185.

These early contributions to the science of meteorology in Syria were supplemented eighteen years later by a more extended series of observations reported by Dr. H. A. DeForest in the *Bibliotheca Sacra*, 1844, pp. 221–224. He kept a record for fourteen months in Beirût, latitude 33° 50′ north, longitude 55° 30′ east, a little above the level of the sea; and at Bhamdûn, in Mount Lebanon, five hours southeast from Beirût, and four thousand feet above the sea. Dr. C. V. A. Van Dyck kept a like record at Aîtath, three hours east-southeast from Beirût, and at an elevation of nearly three thousand feet. Rev. G. B. Whiting, also, and Rev. J. F. Lannean recorded for Jerusalem, latitude 31° 46′ north, longitude 35° 13′ east, and two thousand six hundred sixty feet above the sea.

Instead, however, of reporting these alone, an abstract of similar observations made at different points by our missionaries in Western Asia, and prepared by Rev. Azariah Smith, M. D., for the *American Journal of Science*,[1] is here inserted.

Smyrna is on the seashore, in latitude 38° 26′ north, longitude 27° 9′ east. Constantinople lies on the Bosphorus, in latitude 41° north, longitude 28° 59′. Pera is on the hill directly above Galata, and Bebek is half way up the Bosphorus, on its northern shore. Brûsa lies fifty-seven miles east-southeast from Constantinople, at the foot of Mount Olympus. Trebizond is on the southeast coast of the Black Sea, in latitude 41° 1′ north, and longitude 39° 46′ east. Erzrûm is one hundred and twenty miles southeast of Trebizond, and not far from six thousand two hundred and twenty-five feet above the sea. Mosul is in latitude 36° 19′ north, longitude 43° 12′ east, in a plain on the banks of the Tigris. Oroomiah, or Oormia, is in latitude 37° 30′ north, and about longitude 45° east, four thousand five hundred or five thousand feet above the sea. Mount Seir is in latitude 37° 28′ north, and seven thousand three hundred and thirty-four feet above the sea.

[1] Do., 1846, pp. 72–85.

Place and Month.	Year.	Average sunrise.	Average 2 P.M.	Average 9 P.M.	General Average	Coldest, and date.	Warmest, and date.
January.		°	°	°	°	°	°
Oormia (Oroomiah)	1845	11.	22.	14.	15.67	3	36
Erzrûm	1836	*16.27	†16.37			−10	38
	1837	*16.8	†22.39			−4	40
	1838	‡17.81	19.51	‖8.54	15.29	−20	34
Trebizond	1839	*41.16	†47.39			39	64
	1844	44.52	48.35	45.68	46.18	28th, 31	12th, 62
	1845	*39.64				12th, 31	28th, 53
Constantinople (Bebek)	1844	38.70	42.13	39.40	40.07	20th, 24	29th, 53½
	1845	40.1	47.73	42.19	43.34	20th, 30	23d, 58
Constantinople (Pera)	1840	§37.35	41.35	**39.35	39.68	18	54
	1841	§42.71	45.48	**43.35	43.85	29	56
Brûsa	1844	35.	41.5	38.	38.17	27th, 24	9th, 58
	1845	36.32	46.81	39.1	40.74	16th, 25	31st, 60
Smyrna	1844	39.	49.	42.65	43.55	27th, 27	23d, 57
Beirût	1843	54.	59.25	††57.36	56.88	51	67
	1844	50.	59.14	52.04	53.76	23d, 44	18th, 71
	1845	46.74	57.90	49.19	51.28	36	64
Aîtath	1843	46.	53.30	††50.	49.75	42	59
Jerusalem	1844	44.63	51.09	47.45	47.72	40	61
Mosul	1844	38.	47.	††46	43 67	1st, 30	14th, 55
February.							
Oormia	1845	25.	40.	28.	31.	8	56
Erzrûm	1836	*25.93	†27.67			10	41
	1837	*19.08	†21.81			0	38
	1838	‡23.37	25.06	‖14.18	20.87	−10½	42½
Trebizond	1839	*46.56	†46.92				
	1844	50.1	52 85	51.96	51.04	20th, 38	23d, 67
	1845	*46.46				33	4th, 46
Constantinople (Bebek)	1844	47.0	48.9	49.3	48.4	2d, 36	29th, 69
	1845	40.14	45.33	40.57	42.01	18	3d, 62
Constantinople (Pera)	1840	§37.59	41.04	**38.07	38.90	25	59
	1841	§37 25	42.82	**38.57	39 58	31	56
Brûsa	1844	47.5	55.5	50.0	51.0	26th, 36	29th, 72
	1845	40.38	47.36	41.18	42.97	22d, 23.5	2d, 65
Smyrna	1844	47.02	59.48	50.39	52.3	18th, 32	29th, 68
Beirût	1843	56.71	63.85	††61.89	60.82	53	69
	1844	52.80	62.33	55 25	56.79	48	70
	1845	52.82	64.03	54.10	56.98	47	72
Jerusalem	1844	50.02	58.09	53.07	53.73	45	66
Mosul	1844	44.	††55.	51.	50.	1st, 35	26th, 63
March.							
Oormia	1845	26.	37.	30.	31.	11th, 22	24th, 70
Erzrûm	1836	*30.75	†35.87			1	49.5
	1837	*37.41	†34.11			14	52
	1838	‡34.06	35.87	‖24.05	31.33.	15	48
Trebizond	1839	*43.41	†43.45			39	51
	1844	50.26	52.84	50.52	51.21	17th, 40	10th, 71
Constantinople (Bebek)	1844	46.29	51.16	44.9	47.45	31st, 38	8th, 67
	1845	47.13	55.26	49.19	50.53	3d, 34	19th, 78
Constantinople (Pera)	1840	§37.84	42.52	‖39.06	39.81	24	57
	1841	§39.19	43.29	‖40.06	40.84	29	53
Brûsa	1844	45.	53.	47.5	48.5	25th, 36	9th, 76
	1845	50.13	59.65	52.55	54.11	25th, 35	20th, 86
Smyrna	1844	47.93	60.93	50.21	53.02	15th, 39	9th, 75
Beirût	1843	57.16	65.32	††58.88	60.32	50	73
	1845	57.87	69.	59.70	62.19	49	84
Aîtath	1843	50.23	58.14	††52.50	53.62	40	76
Jerusalem	1844	53.	69.	58.03	60.01	47	74
Mosul	1844	51.	62.	††58.	57.	17th, 45	21st, 69

Index to signs: * 9 A.M. † 4 P.M. ‡ 8 A.M. ‖ 8 P.M. § 7 A.M. ** 10 P.M. †† Sunset.

Place and Month.	Year.	Average sunrise.	Average 2 P.M.	Average 9 P.M.	General Average	Coldest, and date.	Warmest, and date.
April.		°	°	°	°	°	°
Erzrûm	1836	*46.5	†50.15			34	62
	1837	*46.83	†51.13			41	62
	1838	‡47.23	48.02	‖36.63	43.96	30	64.5
Trebizond	1838	*51.13	†51.76			39	73
	1839	*47.73	†47.9			44	54
	1844	45.79	48.68	46.66	47.04	13th, 33	29th, 66
Constantinople (Bebek)	1844	45.7	52.29	45.27	47.75	13th, 36	27th, 74
	1845	52.63	64.43	55.53	57.53	3d, 34	20th, 80
Constantinople (Pera)	1840	§43.03	50.37	**44.07	45.82	35	61
	1841	§48.23	55.3	**49.97	51.17	40	64
Brûsa	1844	44.	53.	48.	48.33	12th, 34	28th, 76
	1845	53.04	69.03	58.33	60.25	3d, 34	12th, 85
Smyrna	1844	44.43	62.33	52.10	52.95	4th, 35	28th, 80
Beirût	1842				67.80	63	92
	1843	61.13	67.23	†‡64.13	64.16	55	74
	1845	59.07	71.15	62.	64.07	46	85.5
Aîtath	1843	52.97	63.17	††57.27	57.80	42	76
Jerusalem	1844	49.04	64.	51.07	54.70	38	72
Mosul	1844	50.	62.	††57.	56.33	14th, 38	30th, 75
May.							
Erzrûm	1836	*52.22	†55.31			34	72
	1837	*40.	†60.			36	66
	1838	‡54.30	58.57	‖46.5	53.12	41.5	67.5
Trebizond	1838	*63.23	†63.55			58	70
	1839	*60.12	†60.46			51	70
	1844	57.42	61.61	58.48	59.17	1st, 50	20th, 70
Constantinople (Bebek)	1844	55.3	62.22	55.18	57.53	3d, 49	17th, 81
	1845	60.26	72.84	64.35	65.82	6th, 49	31st, 87
Constantinople (Pera)	1840	§58.03	67.48	**60.32	61.94	47	81
	1841	§56.13	65.36	**58.	59.83	48	75
Brûsa	1844	57.	67.	60.5	61.5	5th, 50	22d, 77
	1845	62.81	79.35	68.23	70.13	1st, 51	31st, 93
Smyrna	1844	58.35	74.13	64.23	65.57	4th, 48	21st, 84
Beirût	1842				73.83	62	92
	1843	66.13	72.68	††69.10	69.30	56	83
	1845	68.26	76.39	67.64	70.76	57	97
Aîtath	1843	59.45	71.13	††64.10	64.89	48	82
Jerusalem	1843	§61.21	73.14	69.32	67.89	49	90
	1844	64.	69.	64.06	65.69	55	83
Mosul	1844	66.	82.	74.	74.	1st, 58	24th, 91
June.							
Erzrûm	1836	*65.83	†65.96			43	80
	1837	*65.66				58	71
	1845	51.	67.9	59.2	59.37	36	79
Trebizond	1838	*71.73	†70.2			66	80
(16th to 30th)	1843	69.	76.	70.		62	79
	1844	64.77	70.37	67.	67.38	10th, 57	29th, 78
Constantinople (Bebek)	1844	62.23	78.43	64.43	70.32	7th, 56	29th, 94
	1845	65.07	77.6	67.2	69.96	56	86
Constantinople (Pera)	1840	§62.7	71.03	*64.73	66.15	52	76
	1841	§67.27	74.57	*69.03	70.29	59	80
Brûsa	1844	64.	80.	70.5	68.17	7th, 54	29th, 96
Smyrna	1844	65.9	82.33	72.14	73.46	22d, 60	30th, 92
Beirût	1842				75.43	69	84
	1843	72.77	77.97	75.43	75.39	69	82
Aîtath	1843	64.60	75.27	69.23	69.70	59	84
Jerusalem	1843	§65.30	77.56	72.16	71.74	60	88
Mosul	1843	80.1	92.31	††90.14	87.52	76	100
	1844	76.	96.	83.	86.67	3d, 65	19th, 104

Index to signs: * 9 A.M. † 4 P.M. ‡ 8 A.M ‖ 8 P.M. § 7 A.M. ** 10 P.M. †† Sunset.

Place and Month.	Year.	Average sunrise.	Average 2 P.M.	Average 9 P.M.	General Average	Coldest, and date.	Warmest, and date.
July.		°	°	°	°	°	°
Oormia, 15th to 31st	1844	66.59	86.15	74.	75.58	15th, 64	25th, 88
Erzrûm	1836	*69.56	†75.11			56	88
	1837	*69.04				56	77
	1845	58.5	76.5	66.5	67.17	46	80
Trebizond	1838	*74.77	†75.03			70	84
	1843	70.	78.	72.	73.33	60	87
	1844	72.8	79.57	75.7	76.02	9th, 68	21st, 86
Constantinople (Bebek), 19th to 31st	1844	71.92	82.04	75.15	76.37	25th, 60	20th, 86
Constantinople (Pera)	1840	§73.03	81.23	*74.1	76.12	66	88
Brûsa	1844	71.5	87.5	78.5	79.17	24th, 63	4th, 98
Beirût	1842				82.38	76	95
	1843	78.15	84.74	81.67	81.52	74	88
Aîtath	1843	71.16	78.71	75.26	75.04	64	87
Bhamdûn, 20th to 31st	1843				73.50	68	78
Jerusalem	1843	§72.35	84.44	75.23	77.34	66	94
Mosul	1843	82.1	100.97	††94.48	92.52	74	106
	1844	·86.	10.6	95.	95.67	10th, 78	24th, 114
August.							
Oormia	1844	68.	83.	73.	74.67	10th, 57	1st, 89
Erzrûm	*1836	*69.12	†80.5			62	86
	1837	*65.37				56	75
	1845	59.5	79.5	67.5	68.83	52	84
Trebizond	1838	*75.19	†75.32			70	81
	1843	71.	80.	68.	73.	45	85
	1844	70.93	77.91	74.4	77.47	26th, 67	1st, 84
Constantinople (Bebek), 1st to 8th	1844	70.71	83.	75.14	76.28	68	1st, 85
Constantinople (Pera)	1840	§69.35	77.87	*71.52	72.91	65	84
Brûsa	1844	67.	84.0	74.5	75.17	19th, 61	1st, 92
Beirût	1842				83.00	78	89
	1843	77.07	84.61	81.76	81.13	75	87
Aîtath	1843	64.11	77.05	72.63	71.26	66	82
Abeih	1843	65.03	72.94	67.26	68.41	59	80
El Abadiyeh	1843	65.64	75.54	72.68	72.29	62	81
Bhamdûn	1843				69.16	62	84
Jerusalem	1843	§68.25	79.06	70.33	72.55	66	90
Mosul	1843	81.03	98.	††92.9	90.64	74	105
September.							
Oormia	1844	57.	78.	64.	46.33	24th, 50	5th, 85
Erzrûm	1836	*55.37	†64.19			38	76
	1837	*60.65				44	69
Trebizond	1838	*73.17	†72.93			68	78
	1843	65.	73.	66.	68.	59	79
	1844	68.13	73.83	69.56	70.51	23d, 63	2d, 81
Constantinople (Bebek)	1844	65.28	76.31	68.31	69.93	29th, 60	2d, 83
Constantinople (Pera)	1840	§65.43	72.87	**67.3	68.53	60	84
Brûsa	1844	63.	79.	68.5	70.17	28th, 58	14th, 89
Smyrna	1843	60.2	76.51	68.1	68.27	51	85
Beirût	1842				82.67	78	93
	1843	72.77	82.13	††74.83	76.58	70	86
Aîtath	1843	64.87	72.93	††69.10	68.97	59	80
Abeih	1843	59.52	68.69	††64.15	64.12	54	80
El Abadiyeh	1843	62.47	72.13	††68.67	67.76	58	85
Bhamdûn	1843				71.83	62	83
Jerusalem	1843	70.28	77.18	69.27	72.24	62	89
Mosul	1843	71.71	87.69	††83.55	80.98	30th, 68	18th, 93

Index to signs: * 9 A.M. † 4 A.M. ‡ 4 P.M. ‖ 8 P.M. § 7 A.M. ** 10 P.M. †† Sunset.

Place and Month.	Year.	Average sunrise.	Average 2 P.M.	Average 9 P.M.	General Average	Coldest, and date.	Warmest, and date.
October.		°	°	°	°	°	°
Oormia	1844	48.	65.	55.	56.	21st, 40	12th, 72
Erzrûm	1835	*51.69	†57.48			43	65
	1836	*48.19	†58.			35	66.5
	1837	‡45.52	48.87	*40.96	45.12	26	62
Trebizond	1838	*60.95	†62.15			49	81
	1843	63.74	69.86	65.42	66.34	54	86
	1844	60.56	67.75	63.11	63.81	13th, 53	9th, 76
Constantinople (Bebek), 1st to 18th	1844	59.53	69.56	60.	63.03	2d, 50	17th, 76
Constantinople (Pera)	1840	§57.58	63.94	**59.29	60.27	45	77
Brûsa	1843	57.31	69.35	59.83	62.15	51	79
	1844	57.5	69.	61.5	62.67	20th, 50	22d, 77
Smyrna	1843	55.32	70.73	62.15	62.73	46	79
Beirût	1842				79.82	72	90
Bhamdûn, 1st to 15th	1843				67.33	53	82
Jerusalem	1843	§64.08	74.04	67.13	68.42	60	89
Mosul	1843	65.3	78.65	††74.71	72.89	56	87
November.							
Oormia	1844	36.	56.	42.	44.67	21st, 23	7th, 68
Erzrûm	1835	*35.43	†41.07			6	50½
	1836	*33.52	†40.78			13	54
	1837	‡35.32	40.17	‖33.13	36.21	24	53
Trebizond	1838	*58.85	†59.38			45	48
	1843	57.	61.	58.17	58.72	46	69
Constantinople (Bebek)	1844	55.21	61.72	56.03	57.65	29th, 39	10th, 76
Constantinople (Pera)	1840	§52.53	57.3	**54.13	54.65	31	66
Brûsa	1844	53.	62.5	57.	57.5	29th, 34	10th, 82
Smyrna	1843	49.90	60.34	53.67	54.64	40	70
Beirût	1842				68.56	58	81
	1843	61.10	67.41	62.21	63.57	52	78
	1844	59.77	71.70	63.47	64.98	47	81
Jérusalem	1843	56.08	62.08	58.63	58.93	48	78
Mosul	1843	56.43	62.5	59.4	59.44	48	79
December.							
Oormia	1844	28.	31.	29.	29.33	28th, 12	8th, 46
Erzrûm	1835	*22.07	‡24.09			0	44
	1836	*19.	†24.05				
	1837	‡22.97	26.04	‖17.55	22.22	−7	39
Trebizond	1838	*45.77	†46.67			34	57
	1843	44.65	49.29	45.67	46.54	36	62
	1844	*42.03				31st, 30	21st, 54
Constantinople (Bebek)	1844	39.68	44.2	40.19	41.36	5th, 26	15th, 53
Constantinople (Pera)	1839	§43.41	46.1	**43.97	44.49	18	54
	1840	§37.06	40.48	**38.26	38.6	23	55
Brûsa	1844	37.5	44.	39.	40.17	6th, 24	13th, 55
Smyrna	1843	39.03	50.93	41.39	43.78	26	62
Beirût	1842				60.13	52	70
	1843	51.26	58.63	††52.52	53.93	42	66
	1844	52.71	60.87	54.42	56.	46	70
Aîtath	1842				51.87	42	66
Jerusalem	1843	§45.	50.08	47.06	47.38	36	58
Mosul	1843	42.45	49.36	47.	46.27	30	57

Index to signs: * 9 A.M. † 4 P.M. ‡ 8 A.M. ‖ 8 P.M. § 7 A.M. ** 10 P.M. †† Sunset.

Place.	Altitude	N. Lat.	E. Lon.	Year A. D.	Av. for year.	Coldest.	Warmest.	Range.
		° ′	° ′		°	°	°	°
Erzrûm	6,225	39 57	40 57	1838	43.61	−20	84	104
Oormia	5,000(?)	37 30	45 10	1844–45	50. (?)	3	89	86
Bebek	150	41 7	28 59	1844	58.01	24	86	62
Brûsa		40 5	29 10	1844	58.22	24	98	74
Trebizond	100	41 1	39 45	1843–44	59.51	31	86	55
Smyrna	50	38 26	27 7	1843–44	61. (?)	26	85	59
Jerusalem	2,500	31 47	35 14	1843–44	62.80	36	94	58
Mosul	.	36 19	43 10	1843–44	67.80	30	114	84
Beirût	50	33 50	35 28	1843	68.32	44	90	46

REMARKS ON THE PRECEDING TABLES.

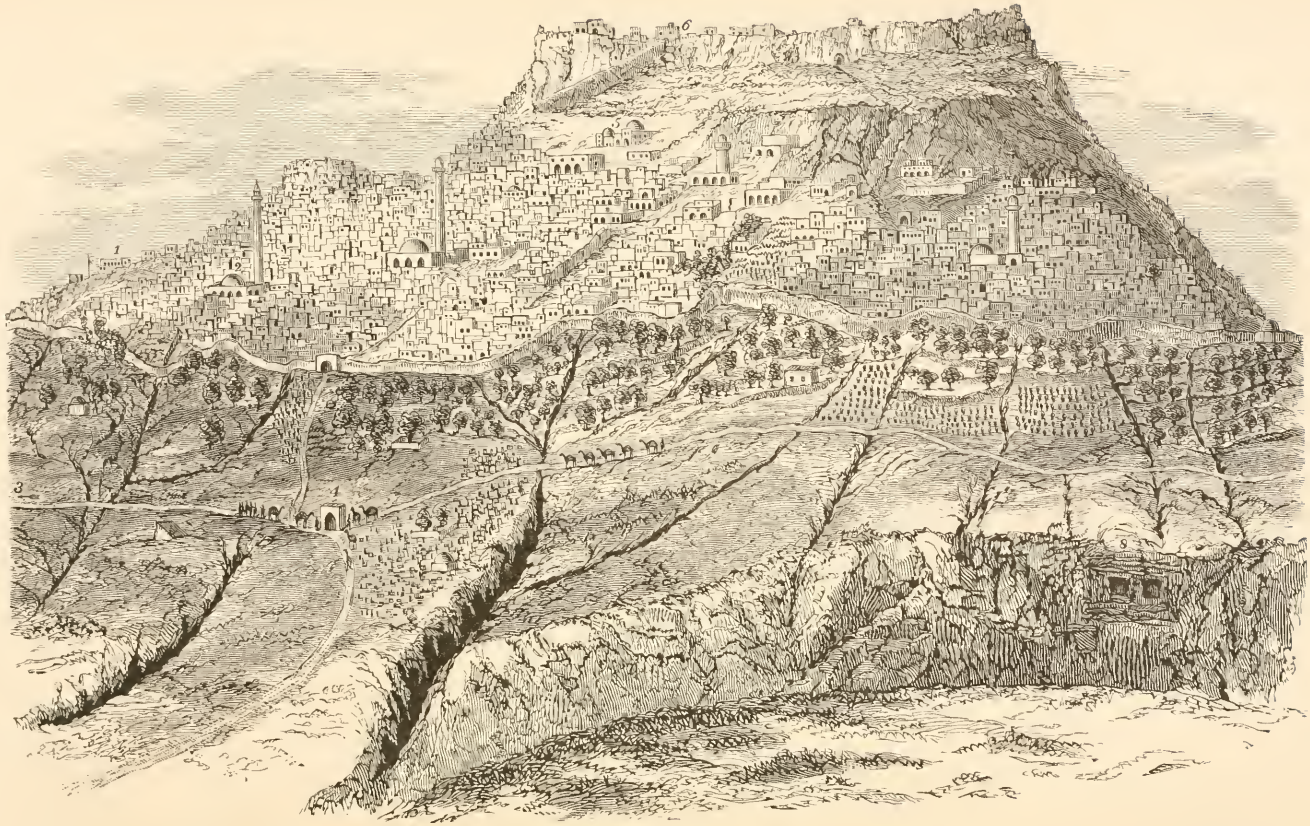
The coldest day at Beirût from April, 1842, to April, 1843, was March 23d, when the mercury stood at sunrise 50°, at 2 P.M. 57°, and at sunset 53°; average, 53.33°. The warmest day was August 7th: at sunrise 77°, 2 P.M. 95°, sunset 83°; average, 85°. Difference between the extremes, 45°. The average of December was the lowest, 60.13°, and of July the highest, 83°. The average difference between Beirût and Bhamdûn from July 25th to October 15th was 12.1°, and between Beirût and Aîtath, 7.11° in the same time.

During the year ending April 30, 1843, rain fell at Beirût on seventy-three days, or an average of one day in five. There was none from June 2d till September 21st, and from that date till November 1st, only four slight showers; and no rain at Bhamdûn till October 16th, save a slight sprinkle September 21st, and a shower October 10th. The rainy days at Beirût were as follows: April, two days; May, eight days; June, one day; September, one day; October, three days; November, eleven days; December, twelve days; January, twelve days; February, nine days; March, seven days; April, nine days; May, five days; at Aîtath, in December, 1842, eight days; and in January, 1843, ten days. In February no record was kept. March had nine, April seven, and May four days.

At Beirût, during summer, west and southwest winds go down after sunset, and between 8 and 9 P.M. a land-breeze sets in and makes the nights comfortable; after sunrise the sea-breeze sets in. Five sixths of the time the wind is west or southwest.

In May, 1843, the coldest day at Jerusalem was the 4th. Mercury at sunrise 49°, and toward sunset it rose to 50°. The warmest was the 14th, with sirocco: at sunrise 70°, 2 P.M. 86°, 3 P.M. 90°, and sunset 75°; average, 80.25°. In the same month Beirût averaged 4.92° higher at sunrise, 0.46° lower at 2 P.M., and 0.22° lower at sunset; general average, 1.41° higher at Beirût.

The high average at Jerusalem was owing to the prevalence of the sirocco for ten days; in Beirût and Aîtath it prevailed only two. In Western Asia, rain is very rarely known to fall during several weeks in summer. In Syria, this period reaches from the beginning of June to the end of September, with little rain in May and October. At Mosul, the dry season begins a month earlier, and at Erzrûm a month later; but Oroomiah is seldom without rain a month at a time, owing to the neighboring lake. All of these places are subject, more or



MARDIN, EASTERN TURKEY.

less, at all seasons, to the hot and dry sirocco, which prevails several days, and causes excessive languor. In the north of Asia Minor it usually blows from the south; but in Cyprus it comes from the north, and in Syria it has no uniform direction.

At Erzrûm, more than a mile above the sea, the winter is cold. The mercury, Mr. Parmelee says, is sometimes 20° below zero, but with fewer sudden changes than in Vermont. The air, however, is so dry, pure, and bracing, and there is so little wind, that the cold is easily borne. The stars shine with unusual luster, and he pronounces it the healthiest climate in the world.[1] The nights are cool during the entire year; but though the region is so elevated, neither field nor garden can flourish without irrigation; and this is true of all Turkey, the southern shore of the Black Sea excepted. Even among the mountains of Tiary and Jelu, no land can be cultivated without a stream of water. Still, there are exceptions, as Dr. Smith found, when, on June 21st and 22d, 1845, he encountered a storm on the plain of Erzrûm that left the ground covered with snow to the depth of six or eight inches. Few of the inhabitants had ever known such an occurrence.

Trebizond is noted for its abundant moisture, and the small range between its extremes of heat and cold. Everything there rusts, moulds, or gathers dampness. The situation of Constantinople, between the Black Sea and the Marmora, exposes it to northerly and southerly winds; northeast is the prevailing direction. Its temperature in winter is milder than the same latitude in America, but it is more chilly than the bracing air of New England. It is a common saying there that one must keep his best fuel till March. The vicinity of Mount Olympus, seven thousand feet high, causes a large range of temperature at Brûsa; yet invalids crowd there in summer to the hot baths that nature provides in that vicinity.

At Smyrna the annual range is not great, but the daily average is 14°, and the dampness of winter makes it uncomfortable to Americans. Mardin is in about 37° 18′ north latitude, on the southern face of Mount Masius, and looks down from its lofty eyrie on the vast plain of Mesopotamia. Rev. W. F. Williams describes its climate as in winter bleak and boisterous, with rain and snow. Clouds cling to the mountain side, and make it dark at noon. The summers, however, are clear and delightful, and the temperature is like that of New York city; drier and cooler than Aintab.[2]

The climate of Mosul is very hot, though the snow-clad peaks of Jelu are in sight from the city. January, 1844, the lowest temperature was 30°, and in July the highest was 114°—range, 84°; average of July, 95.67°, and of the year, 67.80°. This is extreme for north latitude 36° 19′. All classes sleep on the roofs from May till September. Clouds or dew during summer are alike unknown; but winter is the rainy season, damp and chilly. Then the earth is covered with rank vegetation. In January the grass is almost up to the horses' bellies, but the whole region is a sere desert in June. The wheat harvest is finished in May, though near Oroomiah it is not over till the middle of July, and, on the high lands near Julamerk, wheat was still green at the end of

[1] *Life Scenes Among the Mountains of Ararat*, pp. 57-58. [2] *Missionary Herald*, 1860, p. 172.

August, 1844; and well might it be so late, when in Ashitha, April 27th, 1843, everything was covered with sleet, which next day changed to snow; and May 3d and 4th, rain, hail, and snow fell each day. Even that was counted unusually mild for the season, for the feast of Mar Guwergis (May 1st) is usually celebrated on the surface of the unmelted snow.

Near Mosul, in the summer, the soil gapes open in cracks. In July, 1852, the mercury rose to 117° in the shade, and in 1844, it was sometimes 100° at midnight, and the wind at that hour seemed to come from the mouth of an oven. At that season siroccos sometimes fill the air with fine sand, that penetrates every closet and sifts into every drawer and trunk. The heat is stifling, in-doors and out, and the air seems almost impervious to light. Summer there makes sad havoc with furniture. If fastened with glue, it falls to pieces. The ivory handles of knives and forks split open, and it is impossible to keep a piano in tune in the terrible heat.[1]

Dr. DeForest gives the temperature of several fountains in Lebanon, as follows:

1842, June 2, Bhamdûn	55°
" 9, Ain Anub	64°
" 9, Ain Bsaba	66°
" 9, Ainab	59°
" 10, Abeih	59°
" 10, Aleih	61°
" 10, Khan Kehaly	64°
Sept. 5, Below Ain Zhalty	58°
" 5, At Ain Zhalty	62°
1842, Sept. 5, Barûk	53°
" 7, Jezzin	55°
" 7, 'Ammatur	57°
" 27, Falugha	62°
" 27, Kefr Silwan	54°
" 28, On road to Sunnin	50°
" 29, Ain Mustuleh	47°
" 30, Karnail	59°
Oct. 1, Ain ed Dilbeh	57°

Ain Mustuleh is at the base of Jebel Sunnin, and the amount of water at Ain Zhalty, Barûk and Jezzin, and Ain el Dilbeh, is large enough to turn two pairs of mill-stones, with a fall of only six or eight feet. The last is one of the sources of the river of Beirût.

Rev. G. C. Knapp describes Bitlis as abounding in springs, some of them mineral and effervescent. He sent home a sample of the water of one of these last, which was analyzed by Prof. E. H. Swallow, of Harvard College, with the following results: In the gallon, 13.5 grains of calcium; magnesium, 2.1; sodium, 10.2; potassium, 6.1; iron, 2.8; sulphuric acid, 12.6; chlorine, 6.6; carbonic acid, 43; boracic acid, 5.3.

INDIA.

In India the heat is more intense at the same latitude than in America, and the difference between the temperature in the sun and in the shade is greater; hence, exposure to the sun is more injurious. The Anglo-Saxon race cannot perform so much labor or for such a length of time as at home, without risk of serious injury, though the natives suffer but little from the heat. The same degree of cold causes greater suffering than with us, and to the natives more than to Europeans. The mean temperature of Calcutta in January is 67°;[2] in Madras 77°, and in Bombay 78°. The mean temperature of May, generally

[1] *Dr. Grant and the Mountain Nestorians*, pp. 201–202, 229, 307.

[2] F. DeW. Ward says: In Calcutta 69.5°, Bombay 77°, Madras 78.15°. *India and the Hindoos*, p. 12.

the hottest month of the year in Calcutta, is 83°,[1] in Madras 87°, and in Bombay 85°; showing that the average of the coldest months is several degrees higher than that of the hottest months in cities situated in the same latitude on this side of the Atlantic.

The punka is used in houses to mitigate the heat. These are frames covered with cloth, of the length of the room, and two or three feet in width. They are suspended by ropes, and swung to and fro over the inmates of the apartment, by native attendants. They are used in churches as well as houses. The curtains hanging before doors and windows are also kept wet, so as to cool the air passing through them. These things are as essential in India as stoves and furnaces in America.[2]

Instead of our four seasons, in India there is the rainy and the dry season. In the central and northern provinces they speak of the rainy, the cool, and the hot season; and on the eastern coast they sometimes divide the year into the southwest and northeast monsoons. The southwest monsoon lasts from June till September, and is the rainy season. Its coming is indicated by a moist haze, fleecy clouds on the hills in the morning, and large banks of clouds in the afternoon. In the more elevated regions, severe thunder-storms mark its commencement and close. It commences at Cape Comorin and advances northward, passing by the Coromandel coast. The greatest rains fall along the coast and among the mountains. On the western coast the quantity varies from seventy to one hundred inches. On the east it is generally less. On the Ghauts it often exceeds two hundred inches, and occasionally reaches three hundred. Their summits are wrapt in clouds, and the rain is almost incessant. On the Coromandel coast rain falls in October and November. Hence they speak of the southwest and northeast monsoons, for their rains come from the Bay of Bengal. In Bengal the rains come from the south, and pass up the valley of the Ganges to the Himálayas, where they gradually cease.

The rainy season is the season of growth, and combined warmth and moisture render that growth very luxuriant. The change in the landscape is surprising. The rivers fill their dry channels, and the bare fields are covered with a luxuriant vegetation. On high table-lands the rains often continue into October. After that, the weather is fair; there is seldom a shower or a cloud. The atmosphere is often smoky, the ground is parched to the depth of several feet, and the wind raises clouds of dust; vegetation dies except where the land is irrigated; cattle become lean, and require to be fed as in our winter. Those districts that have no forests are very desolate, and trees must be deep rooted or perish. Water, of course, becomes very scarce, and in March, April, and May, the mirage is common, called "deer water," because the deer so often are seen running after it, in the vain hope of quenching their thirst. All classes then long for and welcome the first signs of the approach of the rainy season.[3]

[1] F. DeW. Ward says: In Calcutta 88.6°, Bombay 85°, and Madras 89°. The observations were probably in different years.

[2] *India, Ancient and Modern*, pp. 3–5.

[3] *India, Ancient and Modern*, pp. 5–8.

SIAM.

There is great uniformity of temperature in Siam. During the five years 1840–1844, Rev. J. Caswell did not find the thermometer at Bangkok rise above 97° or sink below 61°; though in January, 1845, it fell as low as 54°. In 1844 the thermometer was placed outside the house, and sometimes stood three or four degrees lower than it did inside in the morning. During the first four months of 1845 the greatest daily range was 24.16°, 15.15°, and the smallest 10.8°, 3.4°; average daily range, 16.03°, 12.64°, 10.90°, 10.60°. During the hot season, from the middle of February to the middle of May, in the morning the mercury seldom stands below 77° or above 83°. In the hottest part of the day it is seldom below 87° or above 93°. The rainy season lasts from the middle of May till the first of November, when two or three weeks of warm weather precede the northeast monsoon. The temperature of morning during this season varies little from that of the hot season, but that of the afternoon is five degrees lower.[1]

	SYNOPSIS OF MEANS.					SYNOPSIS OF EXTREMES.					SYNOPSIS OF RAINY DAYS.				
	1840.	1841.	1842.	1843.	1844.	1840.	1841.	1842.	1843.	1844.	1840	1841	1842	1843	1844
January. .	77.16	78.77	79.32	77.53	74.59	61.89	65.90	66.88	64.89	62.90	1	1	1	0	2
February .	80.80	80.84	83.13	79.50	79.32	71.91	70.90	74.90	70.90	62.92	3	1	2	9	2
March . .	83.58	85.73	83.73	83.71	85.79	73.94	76.94	77.91	73.93	73.97	2	1	11	3	4
April . . .	83.60	87.25	84.50	85.03	85.32	75.95	75.97	77.93	77.94	73.97	9	5	10	5	8
May . .	84.08	84.67	83.41	84.75	84.58	75.73	78.94	78.93	76.96	73.97	18	19	20	10	18
June . . .	82.27	84.40	83.12	84.44	82.50	76.91	78.93	77.91	77.95	75.90	21	15	23	12	21
July . . .	82.66	84.39	81.92	82.51	81.28	76.91	80.91	77.90	77.90	75.90	16	14	12	18	20
August . .	82.38	84.84	82.16	82.75	80.07	76.91	79.93	76.90	77.91	74.88	19	17	11	15	25
September.	82.83	83.48	82.02	82.01	80.15	75.93	78.89	75.92	75.92	74.88	14	12	18	21	21
October. .	81.77	84.55	80.57	81.27	79.70	74.91	77.93	72.91	71.90	74.89	9	17	14	9	16
November	81.15	82.58	78.92	80.83	77.52	68.89	75.90	68.88	70.90	64.86	8	11	4	2	12
December.	76.34	80.40	77.11	75.45	76.98	65.87	70.90	62.88	61.88	63.88	6	5	1	6	3
Mean of Year.	81.55	83.75	81.66	81.65	80.65	*Extremes of Year.* 61.96	65.97	62.93	61.96	62.97	126	118	127	110	152

CHINA.

The temperature of China in general is moderate; softened in winter by winds from the ocean, and mitigated in summer by those from the mountains. In the north the cold is severe and long-continued. The thermometer at Peking sinks to 20° below zero. In the south, summer heat ranges from 75° to 96°, and in winter from 30° to 55°. Violent winds often occur about the autumnal equinox.[2]

The people are not, as in India, deluged with rain one monsoon, and parched with drought the other. The average temperature of the empire is lower than that of other countries in the same latitude, and the coast is subject to extremes like our own Atlantic States. The climate of Peking, though sub-

[1] *Chinese Repository*, 1845, pp. 337–339.

[2] Do., Vol. III, p. 123.

ject to extremes, is salubrious. Water is frozen from December to March, and the mercury ranges from 10° to 25°. Violent storms occur in the spring. In summer the temperature rises sometimes to 95° or 105°, but is usually from 75° to 90°. Autumn is the pleasantest part of the year; the air is mild, the sky serene, and the winds calm. The unsheltered position of the region at the foot of mountains intensifies the extremes of heat and cold. Near rivers and marshes the climate is unhealthy, and produces fever and ague.[1]

The climate of Ningpo and Chusan is made pleasanter by the hills in the vicinity. The thermometer ranges from 24° to 107° during the year, and changes of twenty degrees in two hours are not uncommon, and open houses make this harder to bear. Fires are needed, but the natives only put on more clothing. The river never freezes, though ponds do. Snow does not remain long, though it is frequent. Ningpo and Fuhchau are healthy, for they are not so hot as Canton or so variable as Shanghai. The climate of Amoy is pleasant, but less so than that of the adjacent main land. The city is only a few feet above the tide, and the thermometer ranges from 40° to 96° during the year. The heat lasts longer and has not the sudden changes of Ningpo. The spring is rainy, and typhoons occur in August; but the air is clear and bracing from November to March. On the whole, the climate of Canton and Macao is better than that of most places between the tropics. In July and August the thermometer averages from 80° to 88°, and in January and February from 50° to 60°. The highest in 1831 was 94° in July, and the lowest 29° in January. Thin ice sometimes forms, but not so as to be used. Two inches of snow fell at Canton in February, 1835, and remained three hours; but it was so unusual that some called it falling cotton, and sought to preserve it as a febrifuge. Fogs are common in February and March, requiring fire to dry the houses, though it is not needed for warmth. Most of the rain falls in May and June. From July to September is the monsoon season, with wind from the southwest, and frequent showers temper the heat. After that, northerly winds begin, and from October to January the temperature is pleasant, the sky clear, and the air invigorating. Woolen clothes are worn in January and February, but the natives do not use fires for warmth. The monsoons do not extend above 25° north latitude.

The climate of Macao and Hong Kong has not so great a range as that of Canton. Few cities of Asia excel Macao in climate, though not many natives attain a great age. Its maximum temperature is 90°, and the summer average 84°. The minimum is 50°, and the winter average 68°, with almost constant sunshine. Fogs prevail on the river, and northeast gales are common in spring and autumn, lasting sometimes three days. In winter trees cease to grow, and grass becomes brown; but March brings out the bright green leaves. The unhealthiness of Hong Kong is due to bad drainage. Rain is more abundant there than in Macao. In March new walls drip with moisture, dresses mildew, and cutlery and books are injured by the damp. Kwangtung, Kwangsi, and Yunnan are the most unhealthy of the eighteen provinces, and the central parts of the empire are the most healthy, being more uniform in their temperature.

[1] *Middle Kingdom*, Vol. I, pp. 45–46.

Shanghai suffers from the rapid changes of autumn and spring, and pulmonary and rheumatic diseases prevail. The maximum temperature is 100°, and the minimum 24°;[1] but ice is not common, and snow does not remain long. The summer average temperature is 80° to 93° by day, and 60° to 75° at night. The average in winter is 45° to 60° by day, and 36° to 45° at night. The mercury ranges in a day from twenty to twenty-five degrees.[2] The east winds are unusually chilly.

Sixteen years' observation at Canton gives seventy inches as the annual fall of rain. During four years there were only fifteen rainy days from October to February. Thunder-storms are not severe, but a few persons are killed by lightning every year.[3]

The climate of Manchuria is colder than Moscow, and the houses are very poor. Vines must be covered up from October till April. It is too cold for the mulberry, so the leaves of a tree resembling the oak furnish food for their silk-worms. The ground is said to freeze seven feet deep in Kirin, and about three in Shingking. In winter the cold is 30° below zero. The snow, driven by fierce northeast winds, is so fine that it penetrates clothes, and even the lungs. On the road, the eyebrows become a mass of ice, the beard a huge icicle, and the eyelashes freeze together. The wind pierces the skin like needles, and the ground is frozen for eight months of the year.[4]

Mongolia, also, owing to its dry air and want of shelter from the winds, is excessively cold. Near Chihli the people make their houses partly underground for shelter. Neither rain nor snow falls sufficient for the purposes of agriculture, except on the slopes of the mountains. North of Gobi, as far as to the Russian possessions, the cold in winter is 30° to 40° below zero, and the changes are great and sudden. No month is free from frost; yet on the steppes the heat of summer is intense. Even in cold weather the cattle find food under the thin covering of snow.[5]

The climate of Thibet is exceedingly dry and pure. The valleys are hot, though close to snow-capped mountains. On the table-lands the sky is clear from May till October, and in the valleys the harvest is gathered in before the gales and snows of October. The extreme dryness of the air makes the trees wither, till their leaves may be powdered between the fingers. The people cover the wood-work of their houses to protect it from the destructive dryness. Timber there neither rots nor is worm-eaten — it becomes brittle and breaks. Flesh exposed to the air becomes so hard it may be powdered like bread, and will keep for years; no salt is used in the process, nor does the meat ever become tainted. It is eaten without any further cooking.[6]

There is a brief notice of typhoons in the *Middle Kingdom*,[7] and an article on "Typhoons in the Chinese and Japanese Seas" in the *Chinese Repository*, 1839, pp. 225–245. There is a very elaborate article on the meteorology of the island of Chusan, from September, 1840, to February, 1841, in the same periodical, 1841, pp. 353–371; but as it is the work of officers in the British navy, it does not come within the range of this volume.

[1] Dr. Lockhart says 15°. *Chinese Repository*, 1848, p. 189. [2] Dr. Lockhart says 30° to 40°. Do., do., do.
[3] *Middle Kingdom*, Vol. I, 46–49. [4] Do., Vol. I, p. 159.
[5] Do., Vol. I, p. 165. [6] Do., Vol. I, p. 191. [7] Vol. I, p. 49.

Meteorological Tables of Observations in Canton and Macao, in 1831.

The following tables of average for 1831 were published in the *Chinese Repository*, Vol. I, p. 491. Those at Canton were taken from the *Canton Register*, and those at Macao from a private diary. They were prepared by Dr. E. C. Bridgman.

MONTH.	THERMOMETER.								BAROMETER AT CANTON.		
	CANTON.				MACAO.						
	Noon.	Night.	Highest.	Lowest.	7 A. M.	2 P. M.	Highest.	Lowest.	Mean Height.	Highest.	Lowest.
January	64	50	74	29	62	65	72	53	30.22	30.50	30.00
February	57	49	78	38	59	59	71	49	30.13	30.50	29.60
March	72	60	82	44	66	69	77	55	30.17	30.50	29.95
April	77	68	86	55	73	75	83	66	30.03	30.25	29.85
May	78	72	88	64	77	78	85	71	29.92	30.10	29.80
June	85	79	90	74	82	84	89	74	29.88	30.00	29.75
July	88	81	94	79	84	88	92	81	29.83	30.00	29.60
August	85	78	90	75	82	85	90	79	29.85	30.00	29.55
September	83	76	88	70	81	84	88	76	29.91	30.10	29.70
October	77	69	85	57	75	78	86	61	30.01	30.20	29.50
November	67	57	80	40	65	68	80	57	30.16	30.55	29.95
December	62	52	70	45	62	65	70	57	30.23	30.35	30.15

MONTH.	BAROMETER AT MACAO.			HYGROMETER AT MACAO.			RAIN AT CANTON		CONTINUANCE OF WINDS AT CANTON. MEAN OF FOUR YEARS IN DAYS.							
	Mean height.	Highest.	Lowest.	Average.	Highest.	Lowest.	Mean inches.	Mean number Rainy days.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.
January	30.26	30.50	30.05	76	95	46	0.6¾	3½	11	2	2½	4	4	0½	0	7
February	30.13	30.40	29.97	82	96	70	1.7	7	11	1½	2¼	5¼	1½	0¼	0	6¼
March	30.20	30.48	30.05	78	97	30	2.1½	6	8¾	1¾	3¾	10¾	2½	0	0½	3
April	30.08	30.27	29.93	81	95	50	5.6¾	10	5¼	1	4	14¾	1	0½	0	3½
May	29.95	30.06	29.85	81	95	57	11.8½	15½	4¾	2¼	3½	16¼	1¼	0¼	0¼	2½
June	29.92	30.00	29.85	80	95	70	11.1	9	1¾	0¾	2	21¼	3	0¾	0	0½
July	29.87	30.01	29.60	83	96	70	7.7½	10	1¼	1	1¾	21	3	1¾	0¼	1
August	29.88	30.02	29.56	84	97	70	9.9	12½	3	2	3	18	1¼	0¼	0½	3
September	29.91	30.05	29.35	84	95	50	10.9¼	10	10⅜	4	3⅛	8¾	0	0	0	2¾
October	30.03	30.19	29.45	75	95	20	5.5	5	12	3¼	3⅛	5⅜	1¾	0⅛	0⅛	5¾
November	30.14	30.36	29.95	61	95	20	2.4½	3	23	0½	0⅜	1¼	1⅞	0	0	3
December	30.23	30.31	30.15	71	90	30	0.9¾	3½	18½	2⅞	1⅛	2	2¾	0	0⅛	3⅝

RANGE OF THERMOMETER IN SHANGHAI, FROM MARCH, 1845, TO MARCH, 1846, IN THE SHADE OUT-OF-DOORS.*

MONTH.	AVERAGE.		MAXIMUM.		MINIMUM.		MONTH.	AVERAGE.		MAXIMUM.		MINIMUM.	
	Day.	Night.	Day.	Night.	Day.	Night.		Day.	Night.	Day.	Night.	Day.	Night.
March . . .	47	38	57	46	39	31	September .	78	69	88	77	68	63
April . . .	57	47	81	71	47	44	October . .	67	60	79	71	58	49
May	72	63	88	69	55	47	November .	59	46	73	60	49	37
June	83	71	101	83	64	61	December .	40	30	61	50	30	15
July	88	78	94	80	70	67	January . .	38	28	47	40	30	16
August . . .	90	78	94	78	75	68	February . .	46	34	55	46	32	25

* *Chinese Repository*, 1848, pp. 189–190.

SANDWICH ISLANDS.

The climate of the Sandwich Islands is healthful, and so equable that the Hawaiians have no word for weather. Extreme heat and cold are alike unknown. The mean annual temperature at Honolulu is 75°, and the daily range seldom over 15°. During twelve years the extremes in the shade were 53° and 90°. Northeast trade winds prevail three fourths of the year. The rain-fall is irregular. One year it fell on forty days. In 1870 it was 59.51 inches, and in 1871, 40.09 inches; but the porous soil absorbs it rapidly. Rev. E. Johnson found the mean temperature of Waioli, Kauai, 72°; highest 90°, lowest 54°; amount of rain, 85 inches. The following is his record from April, 1845, to April, 1846:

RECORD KEPT BY REV. E. JOHNSON, AT WAIOLI, SANDWICH ISLANDS, FROM APRIL, 1845, TO APRIL, 1846.

MONTH.	AVERAGE.			Maximum.	Minimum.	Mean.	NORTHEAST TRADES.		VARIABLE.	
	5.30 A. M.	1 P. M.	6.30 P. M.				A. M.	P. M.	A. M.	P. M.
April	66.0	75.0	70.0	82.0	62.0	70.2	21	20	10	11
May	69.6	80.3	74.0	85.0	66.0	74.6	27	27	4	4
June	71.6	82.6	75.0	90.0	66.0	76.4	25	27	5	3
July	72.0	82.0	75.8	86.0	69.0	76.3	30	30	1	1
August	71.6	83.2	76.9	89.0	67.0	77.2	29	29	2	2
September	71.4	82.6	76.6	87.0	68.0	76.8	28	27	2	3
October	69.6	78.5	73.8	84.0	64.0	74.0	18	16	13	15
November.	66.7	78.3	72.0	82.0	57.0	72.3	4	4	26	26
December	65.2	75.0	69.0	82.0	57.0	69.7	7	7	24	24
January	62.0	71.8	67.9	79.0	54.0	67.2	3	3	28	28
February	63.3	73.5	68.4	78.0	57.0	68.4	10	10	18	18
March	63.4	75.8	69.5	80.0	56.0	69.5	18	18	13	13

RECORD KEPT BY REV. E. JOHNSON, AT WAIOLI, SANDWICH ISLANDS, FROM APRIL, 1845, TO APRIL, 1846.—CONCLUDED.

MONTH.	FAIR.		CLOUDY.		SHOWERS.		RAIN.			Rain in inches.
	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	Night.	
April	9	4	4	11	10	9	7	6	17	14.0
May	11	10	5	4	14	15	1	2	10	6.0
June	16	17	2	1	10	10	3	3	12	4.0
July	9	7	7	6	9	16	6	2	21	8.0
August	19	15	2	5	7	8	3	3	12	5.5
September	16	12	3	4	11	13	0	1	14	5.4
October	11	10	5	3	9	10	6	8	22	18.4
November	22	19	2	4	4	4	2	3	10	5.2
December	18	10	6	5	6	6	1	1	11	5.0
January	18	17	8	8	1	4	4	3	10	4.6
February	16	14	10	10	0	1	2	3	10	3.0
March	15	14	6	8	4	4	6	5	16	6.6

In the islands June is the warmest month, and January the coldest and rainiest. Of course, the mountains are colder. At Lahaina, in ten years, the range of temperature was from 54° to 86°. Three thousand feet above Lahaina the mercury ranges from 40° to 75°, and at Waiamea the annual average is 64°. On the windward side of the islands the climate is more trying, but the climate of Honolulu and Lahaina is well adapted for invalids.

SOUTH AFRICA.

In South Africa, of course the seasons are reversed, June, July, and August being winter there ; yet, in Natal it is not so cold as in New England. At noon, toward the end of July, Mr. L. Grout speaks of a temperature of 68°. The seasons on the coast are not well defined. In midwinter some days are as warm as summer, and *vice versa;* and sometimes part of one day is hot and the rest cold, the mercury falling 15° in an hour, and even 40° in half a day. This occurs once or twice in August and in September, and occasionally at other seasons, in connection with a hot wind from the north. One day, near the end of September, Mr. Grout found the mercury at 47°; two or three days after, it was 102°. Then the wind changed to the west, and it fell ten degrees in twenty minutes, and in thirty-six hours was down to 50°, with a cold rain. Yet the cold is not intense. At Umsunduzi, fifteen miles from the sea, and thirty miles north of Natal, Mr. Grout scarcely saw frost more than once a year, and snow or ice was unknown ; though up toward the Kwahlamba range both are found.

The mean temperature from October to March, at Durban, is 73°, and at

Maritzburg 70°; from March to October, 64° at Durban, and 60° at the capital. At Umsunduzi the mercury ranged during the year from 50° to 100°, with an occasional excess of two or three degrees on each extreme. For several years Mr. Grout had no fire in his house, except in an outhouse for cooking. Rain tempers the heat of summer, and sunshine moderates the cold of winter. There is little or no rain from May to August. The entire rain-fall for the year is three feet, only six inches falling during the six cold months. In winter the prevailing wind is from the west or northwest, morning and evening, and generally from the southeast during the day. The prevailing winds in summer are the dry northeast wind and the wet southwest. The hot north wind in early spring is powerful and parching, and blows with increasing force for thirty-six hours, withering plants, warping timber, and loosening the joints of wood-work. Then follows a cold west wind, with thunder and rain. Hail is not uncommon in Natal, but the storms are severest in the cold uplands toward the Kwahlamba. Against the gray buttresses of this mountain jagged masses of ice as large as the fist are hurled with the force of a tornado, till the waters pour down on all sides in roaring torrents.

Thunder-storms are very severe. The wind is generally north or west when they begin, and then turns southeast. The air is not very moist, but the lightning more resembles a ribbon than a line, and the flash lasts while one counts two or three. Its forms are very crooked, and as diversified as a kaleidoscope, and so are its colors, from a dead leaden tinge to bright rose; now delicate pink or light amethyst, and again orange or pale blue or pearly white, reminding one of the colored lights caused by the burning of different metals.

When the winter sky is not clouded by smoke, it is remarkably clear, and stars of the sixth magnitude, rarely seen in England, are distinctly visible; and, though the southern heavens do not present so many bright stars as the north, in places they blaze with a brightness unseen north of the equator, with gaps of absolute blackness, appalling to the eye. The southern pole is marked by no star, but near by are those ghostly spectra of far-off star kingdoms, the "clouds of Magellan."[1]

WESTERN AFRICA.

In western Africa the climate of the coast is not oppressively hot. The daily land and sea-breezes moderate the temperature, which ranges between 70° and 90°. The land-breeze, damp and chilly, begins about 1 o'clock A.M., and lasts tills 10 A.M. The cool sea-breeze blows from noon till midnight. The only seasons are the dry and the rainy. The rain is most abundant where the sun is vertical, and so prevails at different places at different times. Thus, from May to September is the rainy season in Senegambia, and the dry season at the equator. Where the sun is vertical twice a year, there are two dry and wet seasons, but they are shorter. Near the equator heavy showers fall mostly at night; but near the tropics it rains incessantly for weeks and months, and tornadoes prevail every four or five days when the rains

[1] L. Grout's *Zulu-Land*, pp. 39–47.

begin to stop, but last only an hour or two, generally in the afternoon of a sultry day. They come both from the land and the sea. The cloud climbs the horizon like an arch with ragged ends. The increasing darkness and silence are felt alike by man and beast, till the sudden gusts, increasing in violence, cause the trees to bend and creak before them. They stop as suddenly as they begin, and cool and purify the air.

The Harmattan wind comes from the Sahara, and prevails in Senegambia and northern Guinea from December to February, blowing three or four days in succession. It is felt three or four hundred miles from the coast. The atmosphere is dry and hazy. Doors, windows, and wooden articles of furniture crack and split, veneering peels off, book covers curl up, and lips and hands become chapped. The sails of ships are discolored by dust so thick that one could write on it. Lieutenant Maury traces this dust to South America as its source. The air is invigorating to Europeans, but the natives are chilled by it, and put on all the clothing they can muster while it lasts.[1]

NORTHWEST COAST.

Rev. S. Parker speaks of the greater mildness of the climate west of the Rocky Mountains than in the same latitude on the Atlantic coast. He says that the year is divided into the wet and dry seasons; the former beginning in November, and the latter in May; and gives a very elaborate table of temperature and weather from October 4, 1835, to May 15, 1836, filling twelve pages;[2] but, as during half that time he was constantly moving from place to place, and the other half at Fort Vancouver, opposite the present city of Portland, Oregon, this brief statement may suffice concerning a region now so well known.

[1] *Wilson's Western Africa*, pp. 27–30.
[2] *Exploring Tour Beyond the Rocky Mountains*, pp. 315–326.

VI.

NATURAL SCIENCE.

THE aid which foreign missions render to the perfection of science is recognized by none so cordially as by those who are engaged in scientific studies. In the preface to Vol. XVII of the *Smithsonian Contributions to Knowledge*, it is said of missionaries that there is no class of men, whether viewed as scholars or philanthropists, who have earned a higher reputation. Their contributions to history, to ethnology, to philology, to geography, and to religious literature, form an enduring monument to their fame.

"It would be impossible," said Prof. Silliman, "for the historian of the islands of the Pacific to ignore the important contributions of American missionaries to science;" and Prof. Agassiz testified: "Few are aware how much we owe them, both for their intelligent observation of facts and for their collecting of specimens. We must look to them not a little for aid in our efforts to advance future science."

These are very flattering testimonials, for which missionaries and the friends of missionaries may well be grateful. Yet we must not forget that, of necessity, the missionary is debarred from entering into the lists as the compeer of such men as those last quoted. Science now is prosecuted much more thoroughly than formerly. The questions discussed lie so deep, and involve such a thorough acquaintance with special departments of investigation, that no missionary has time to master them, or, even if he mastered them to-day, to keep abreast with the advance of knowledge in the various departments toward which he may, from his advantage of location, be able to afford some help. The celebrated Agassiz could always learn something new from thoughtful fishermen who had eyes to observe the habits of fishes in their own locality; and though the aid rendered by missionaries may be more intelligent, as their education is higher, yet we must not be so blind as to claim for missionaries an equality with the leaders of science, simply because their education and their position give them such excellent facilities for observation. The generosity of the commendations of such men as the Americo-Swiss scientist must meet a corresponding modesty in those whom he commends. None see this more clearly, or are more ready to confess it, than those missionaries who have rendered the greatest service in this department. Dr. S. Wells Williams writes thus: "The chapters in the *Middle Kingdom* on geography and natural history need great enlargement and corrections to adapt them to the present

time. As China has become accessible, experts like Baron Richthopen, Kingsmill, Hanee, and others, have begun to examine its stones, plants, and animals with care and fullness, so that missionary work has been in a large measure superseded. I never knew a missionary who was a thorough naturalist in any branch, but I have known several with general knowledge enough to observe intelligently. In every department of natural history, missionaries in China have only contributed separate papers, but most have lacked that accurate knowledge and detail which are now requisite. Rev. Armand David, of the Lazarist mission, Peking, has done more in zoölogy than all other missionaries in China put together, but it was because he left mission work, and traveled extensively in the pay of the French government. It is impossible to attend to both departments well. Out of one hundred and thirty articles in the *Transactions* of the North China branch of the Royal Asiatic Society, fifty-two are by Protestant missionaries, on a great variety of topics. They have done most valuable work in Chinese language, history, and religion, and the members of the London Missionary Society have excelled all others."[1]

Natural science is based on a foundation of facts that must be built up by toilers in all parts of the world. They must ransack sea and shore, observe the atmosphere and the heavens, report facts and phenomena, and gather specimens and principles. The observers must be intelligent and accurate, and such are our missionaries.

Unsettled scientific hypotheses may be opposed to religion, but true science and religion are co-laborers. The facts of the one and the truths of the other are alike from God. Many tentative theories have been exploded, and many more will be set aside ere the final structure shall rise in majesty on its eternal foundation.

Dr. John Harris[2] speaks of a law of God by which the streams of beneficence sooner or later revisit their source. The reflex influence of missions he specifies as an illustration of this law. Geography, geology, statistics, natural history, philology, and ethnography have been greatly enriched by their labors. They have rectified mistakes concerning linguistic affinities, brought to light ancient literary treasures, reduced many languages to writing, and laid philologists under permanent obligations by their dictionaries and grammars. In the "Oriental Translation Society of London," Sir A. Johnson, former chief justice in Ceylon, moved, and Sir W. Ouseley seconded, a vote of thanks to our mission in Ceylon for such service to science. Dr. Harris also speaks of the value of the aid furnished by missionaries for proving the common origin of the race — a conclusion endorsed by Schlegel, the French Academy, and others.

As Dr. Harris has alluded to the contributions of missionaries to the science of language, and the writer does not wish to intrude into the chapter on Philology, originally prepared by another, a few additional items in that department may conveniently be inserted here.

Numerous vocabularies have been collected by our missionaries in North America and the islands of the Pacific. H. Bingham, Jr., has an unpublished

[1] Letter of February 27, 1880.

[2] *Great Commission*, pp. 198–199.

vocabulary of more than five thousand words of the language of the Gilbert Islands. Rev. B. G. Snow prepared one of the Kusaian tongue, and Dr. L. H. Gulick's Ponapean vocabulary is published by the American Oriental Society.[1] Horatio Hale, philologist of the United States Exploring Expedition under Commodore Wilkes, acknowledges indebtedness to Rev. C. S. Stewart, to the vocabulary of Rev. R. Armstrong, and the dictionary of Rev. L. Andrews, containing 10,000 or 12,000 words; also to his "Notes on the Hawaiian Language,"[2] and to an article of Rev. W. P. Alexander.[3]

It would be tedious to enumerate even the titles of works in this department. Here are a few: *Grammar and Vocabulary of the Hakari Kûrdish*, by Rev. S. A. Rhea;[4] *Grammar of the Modern Syriac of Persia and Kûrdistan*, by Rev. D. T. Stoddard.[5]

The Tamil and English dictionary by Dr. M. Winslow[6] is an enduring monument of missionary scholarship and service to science. The work was begun in 1832, by Rev. J. Knight, of the Church Missionary Society, but ill health soon compelled him to abandon it. Rev. Levi Spaulding then took it up, and in less than a year his health also failed, and Dr. Winslow entered into their labors. But this and four hours' labor every day on the revision of the Tamil Bible obliged him, also, to revisit the United States in 1855. After one year's rest, however, he resumed the work, and had the satisfaction of completing it in 1862 — "a book of prodigious labor and of great value." The *Madras Observer* said that "the British nation, no less than the literary world, were deeply indebted for it. The revered author has greatly promoted the spread of divine truth and of civilization, by his self-denying efforts." The *Madras Times* said that "to the missionary, to government servants, to educated natives, and to the European student, it was a boon of the utmost value." Next to the Sanskrit lexicon of Prof. Wilson, it was the most elaborate dictionary of any of the languages of India.[7] Rev. J. L. Döhne's *Zulu Kaffir Dictionary*,[8] a literary production of great value, deserves mention in this connection.

In 1842, Dr. S. Wells Williams published, at Macao, *Easy Lessons in Chinese*, 8vo, pp. 287; in 1844, *An English and Chinese Vocabulary in the Court Dialect*, 8vo, pp. 440 — one authority says pp. 536; perhaps a later and enlarged edition. In 1856 he published *A Tonic Dictionary of the Canton Dialect*,[9] which is described and highly commended by Rev. W. A. Macy, in the *Journal* of the American Oriental Society.[10] His greatest work, however, in this line is *A Syllabic Dictionary of the Chinese Language*.[11] This cost eleven years of steady toil; contains twelve hundred characters, with their pronunciation in five dialects, and their definitions. Dr. H. Blodget says: "It is the ripe fruit of his

[1] *Journal*, 1872, pp. 1–109. [2] *Hawaiian Spectator*, 1838. [3] Do., 1838.

[4] *Journal of American Oriental Society*, 1872, pp. 118–155.

[5] Do., 1856, pp. 1–180 h.

Prof. Roediger, one of the highest authorities in Semitic lore, praises this grammar in *Zeitschrift der Deutschen Morgen ländischen Gesellschaft, Zehnter Band*, IV Heft, p. 760, Liepsig, 1856.

[6] Madras, 1862, 8vo, containing nearly 1000 pages, and defining 67,452 words.

[7] See Dr. Anderson's *India*, p. 232, and *Missionary Herald*, 1863, pp. 131–132.

[8] 1857, royal 8vo, 459 pp. [9] 8vo, pp. 832.

[10] VI, pp. 566–571. [11] 1874.

life studies; a treasury of knowledge in regard to the Chinese language and affairs which no student can dispense with." Dr. A. O. Treat adds: "It is a work of prodigious extent and research. It supersedes all previous dictionaries, and is likely to be a standard authority for a long time to come."

Even apostolic missions furnish their contributions to science. The inspired narrative of the apostle's voyage to Rome has both geographical and meteorological interest, to say nothing of the light it throws on naval antiquities. Papal missionaries in the sixteenth century furnished their quota, also. Jesuits sent home observations of eclipses from America. No less than fourteen articles in the first nineteen volumes of the London *Quarterly Review* were based on the "Lettres Edifiantes et Curieuses" of French missionaries. A *History of the New World*, by a Spanish missionary, according to Dr. Wm. Robertson, contains more accurate information than any other account of remote countries in that age.

Dr. F. Mason, a Baptist missionary in Burmah for twenty years, has written a volume of nine hundred pages, giving an account of that empire. While his Karens, on a journey, were preparing their evening meal, he analyzed flowers or examined the fish they caught; for, as he says, "The barren heath with its mosses and insects becomes a paradise to the careful observer." Thus do the spare hours of missionaries contribute to science.

It is hardly necessary to say that our missionaries give much information concerning the vegetable productions of their several fields of labor. Rev. S. Parker mentions three kinds of fir beyond the Rocky Mountains; also the cedar, yew, tamarisk, white and black oak, two kinds of ash, three of poplar, white maple, willow, and a tree called the strawberry tree. He enumerates a long list of shrubs, among them the beautiful *Symphoria racemosa*, and berries; the sweet pea, a red clover different from ours, and a white clover; wild flax, sunflowers, a species of broom corn, and a wild grain partaking of the properties of barley and rye. Among nutritive roots, he describes the wappattoo,[1] and the cammas, in the form of an onion, which is roasted, pounded, and made into bread, with a taste like licorice; the cowish, or biscuit root, the *racine amere*, and onion.[2]

Dr. Williams devotes the sixth chapter of his *Middle Kingdom* to the natural history of China. He describes her mineral productions, coal, gypsum, nitre, building and precious stones; her metals and fossils; her hot springs, and other things of that sort. Then he gives an account of her vegetable productions. Among these he specifies the *Gigartina tenax*, from which they make glue, *Aspidium barometz*, or Tartarean lamb — though this is partly artificial, gardeners forming it into a shape like a sheep or other object — and the *Phragmites lachryma*, whence mats are made. He is eloquent in praise of the bamboo. No other plant imparts so Oriental an aspect to a garden as this, which shoots up its wavy plumes to the height of fifty feet, and, swaying in the breeze, is exceedingly beautiful. It is applied by the Chinese to so many uses that it may be called their national plant. Chinese writers mention sixty

[1] Sagittaria.

[2] *Exploring Tour Beyond the Rocky Mountains*, pp. 200–204.

varieties. It is reared from shoots. These, when four or five inches high, are boiled, pickled, and made into comfits. The roots are carved into fantastic images of men, animals, or creatures of the imagination, cut into canes, or turned into oval divining-sticks. The tapering culms are used as poles, for carrying, propelling, or measuring, by porters, boatmen, and carpenters; for joists of houses, and ribs of sails; shafts for spears, and wattles for hurdles; tubes for aqueducts, and troughs for eaves; handles of umbrellas, and ribs of fans. The barrel of the organ and the rod of the lictor — one to make music, the other to elicit cries of pain — are alike from this. The hair-pin and hat, the paper and pencil, and cup to hold pencils, the cup and the bucket, the bellows and the match box, the bird cage and crab net, the fish pole and water wheel, wheel-barrow and hand-cart, are all made of bamboo. Its leaves form cloaks to protect from the rain, and thatches for dwellings. Cut in various ways, the wood is wrought into baskets and trays, twisted into cables, plaited into awnings, and woven into mats. It roofs boats, and forms a wrapping for goods. The shavings are picked into oakum, and stuffed into mattresses. It furnishes bed and sofa, chop-sticks for eating, a pipe or a plate, a curtain for the door, or a broom for the floor. Table, food, and fuel are furnished by it. Ferrules for scholars, and their books, are alike derived from this most serviceable plant. China could not be governed without the constant application of the bamboo. It adorns the garden of the prince, and shades the hut of the peasant. It forms the hedge that separates fields, and feeds the cattle that plough them. The Chinese paint nothing else so well.

He mentions the cocoanut, the fan-leaf palm (*Chamærops*), and pandanus. Several of the aroideæ are cultivated for food, chiefly *Caladium cuculatum*, *Arum esculentum*, and *Indicum*. The tuberous roots of the *Sagittaria Sinensis* contain much farinaceous matter. The sweet flag (*Calamus*) is used in medicine. He mentions a number of lilies, many alliaceous plants, and the red-leaved iron-wood (*Dracæna*). The yam is not common, though the custard-apple has been introduced, and the plantain is the common summer fruit in Canton. Ginger is cultivated through all the interior. There are nineteen genera of *Orchideæ*, among them the air-plants *Vanda* and *Aerides*. The beautiful *Bletia Arundina*, *Spathoglottis*, and *Cymbidium* are common near Macao.

Many species of the pine, cypress, and yew furnish a large proportion of the timber and fuel. The larch and also *Pinus massoniana* are common on the hills. The roots of the juniper and thuja are made into grotesque ornaments. The seeds of the maiden-hair tree (*Salisburia adiantifolia*) are a common nut in north China. The willow grows everywhere, and is sometimes fifteen feet in girth. Oaks furnish galls, acorns, charcoal, and bark for tanning. The chestnut, walnut, and hazel-nut are natives of China. So is the tack-fruit (*Artocarpus*). There are many species of the banyan, or fig. The mulberry (*Broussonctia*) furnishes good paper stock. Hemp is raised. The *Dryandra* is a favorite tree, but the nuts of the *Jatropha* and *Croton* yield more oil. The tallow tree (*Stillingia*) belongs to the same family (*Euphorbiaceae*). The seeds of the *Trapa* are boiled and eaten. The betel

pepper is cultivated. The flowers of the *Jasmine inconspicuus* are used to scent some teas. The pitcher plant (*Nepenthes*) is found near Canton. Many species of *Rumicinæ* are cultivated; among them, spinach, green basil, and buckwheat. The rhubarb plant hardly needs to be mentioned. The fruits of several genera of *Rhamneae*, of the order *Ilicinæ*, are eaten. The *Zizyphus* yields plums resembling the jujube. The leaves of *Rhamnus theezans* are used by the poor for tea.

Peas and beans are common, and a condiment called soy is made from a species of *dolichos*. The bean curd, or bean jelly, is a general favorite. The *Erythrina* and *Cassia* are among the finest flowering trees in the country. The ground-nut abounds.

Chinese fruits, such as pears, peaches, plums, and apricots, are inferior and insipid. The *Loquat* is a pleasant acid. The pomegranate is valued chiefly for the beauty of the blossom, but the guava and rose apple are made into jellies. Twenty species and many varieties of roses are found. The privet, myrtle, henna, hydrangea, passion flower, and leek are among their garden flowers. The *Lager strœmia* is beautiful in blossom; so is the Pride of India, and Chinese tamarisk. The cactus and cereus grow in the south.

Melons, cucumbers, squashes, tomatoes, and egg-plants abound. The *Benincasa Cerifera* is noted for a waxy exudation that smells like rosin. The dried bottle gourd (*Cucurbita Lagenaria*) is tied to the backs of children on boats to keep them afloat if they fall overboard. The fruit of the papaw tree makes the flesh of old hens tender. Ginseng is a government monopoly. Among pinks, *Lychnis coronata*, *Althea chinensis*, and other malvaceous flowers may be mentioned. The cotton tree (*Bombax*) is common at Canton. It is often seventy feet high. The *Gossypium herbaceum* and *Sida tiliœfolia* are cultivated to make cloth. Okra is used for food. They have thirty or forty varieties of *Camellia Japonica*, and the noon flower is common in gardens.

There are eight species of magnolia. The spicy seeds of the star aniseed are much sought after. The tree peony is called the king of flowers. The *clematis* and foxglove grow there. The lotus is valued more for its edible roots than for its religious associations. Though so much opium is used, few poppies used to be cultivated, but now they are raised extensively, and the evil grows worse. More of the *Cruciferæ* are eaten in China than elsewhere.

Of the *Rutinæ* they have oranges, shaddocks, and the fragrant *murraya exotica* and *paniculata*, and *Aglaia Odorata*. The seeds of the sapindus are worn as beads, for they say demons dread that wood. They have the plane tree and two sorts of maple, with the *Pitto sporum tobira*, an ornamental shrub. Among the *Rubiacinae* are several beautiful honeysuckles and a fragrant *Viburnum*. The *Serissa* takes the place of our box in bordering paths, and the *Ixora coccinea* is quite common. Of china-asters countless varieties are raised, and chrysanthemums, succory, lettuce, and dandelion are eaten. The *Labiatae*, or mints, are much cultivated, and the *Solonaceae* are represented by the potato, tobacco, stramonium, and several kinds of capsicum. They have many beautiful varieties of *Ipomea*, as *I. quamoclit*, and *I. maritima*. *Convolvulus reptans* is often planted round pools. The order of *Apocyneæ* boasts the oleander and

Plumeria, while the yellow milkweed and the *Vinca rosea* are less conspicuous. Jessamine is a great favorite. Gorgeous azaleas flourish in Chusan and near Ningpo.

Dr. Williams gives a *résumé* of their great work on *materia medica*, the Pun tsau or Herbal, by Li Shichin, in forty-two volumes, 8vo, but we can only refer the curious reader to his pages.[1]

TEA.

Tired of this dry catalogue, let us turn to a more practical theme, an account of the tea of China, as set forth by the same author, on the authority of a Chinese manuscript written by one of the native dealers in the article.[2]

Name. The English *tea* was doubtless meant to be pronounced like the French *thé*, in accordance with the Fuhkien pronunciation of the word. The Turks and Arabs call it *tshy*, and other nations *cha*, or some modification of that sound.

Original Source. The Periplus of Arrian mentions a wild people called Sesatæ, who carry great burdens in mats which look like vine branches. The Sinnæ, then drawing out the stalks and fibers, nicely double the leaves, roll them into a circular form, and thrust into them the fibers of the reeds. Thus three kinds of malabathrum are formed — hadrosphærum from the larger leaf, mesosphærum from the middling one, and microsphærum from the smaller. This seems to describe tea, and, if so, the native country of the plant is the mountainous region of Assam and Yunnan, where it has recently been found growing wild, and the Chinese traded with the wild Sesatæ for it, before cultivating it themselves.[3]

Date of Origin. Its existence in China cannot be traced back further than about A. D. 350. It was generally known in A. D. 800, when it was called *tu*.[4] Chinese accounts place its introduction in A. D. 315, and add that it did not come into general use till the Tang dynasty, which reigned from A. D. 618 till A. D. 907, when it is also mentioned by two Arab travelers.[5] There is good reason to conclude that the ancient Chinese used tea under the name *ku* or *kia*.

Where Grown. Tea grows in almost every part of the provinces of China, in Corea, Japan, Formosa, Annam, and adjacent regions. The plantations in the Piling hills, a few miles north of Fuhchau, are of recent growth, having been commenced since that port became open to foreign commerce.[6] It grows best in a rich sandy soil, and the sides of hills, with a good exposure and plenty of water, yield the best leaves. The most of the tea exported is grown in Fuhkien, Chehkiang, and Kiangsu, between the parallels of 25° and 35° north. Its cultivation has extended with the increased demand to the western parts of Kwangtung, and districts in Kwangsi. Russia is supplied from Sz'chuen and that vicinity, and Burmah partly from Yunnan.[7]

[1] *Middle Kingdom*, Vol. I, pp. 276–290. [2] Do., Vol. II, p. 127–137. [3] Do., Vol. II, pp. 421–422.
[4] Do., p. 127. [5] Do., p. 422. [6] Doolittle's *Social Life*, etc., Vol. I, pp. 46–47.
[7] *Middle Kingdom*, Vol. II, p. 128.

Cultivation. It is raised mostly by small farmers, who cultivate a few score of the shrubs on their own land. There are few large tea plantations. The seeds are planted in beds, and when the plants are a foot high they are transplanted into rows four feet apart. There they are kept down from three to six feet high, though the wild plant in Assam reaches the height of thirty feet; and usually they present a dense mass of foliage growing on a multitude of small twigs. The leaves are picked when the plant is only three years old; but it does not attain full size before six or seven years, and lives from fifteen to twenty, being gradually killed by the frequent picking of the leaves.

Three crops of leaves are gathered annually: one about the middle of April, when the leaf buds begin to open and are still covered with a whitish down; these yield the finest tea; but no tea can be made from the thin, scentless petals of the blossom. The second harvest is in the beginning of May, when the leaves are of full size. The weather has great influence on their quality and quantity. At this time the whole population, men, women, and children, are busy, picking the leaves into baskets and taking them to the curing-houses. An average pick is thirteen pounds a day, for which the wages are about six cents; so that, even though the plant would grow in the United States, we could never compete with the cheap labor of China. A third crop is gathered in the middle of July, and also a gleaning in August, but these are mostly used by the poor at home. A pound of green leaves weighs three or four ounces when dried.[1]

The camellia and the tea plant have the same name in Chinese. Botanists call it Thea, and it is still disputed whether the different sorts are distinct species or mere varieties. Perhaps cultivation in different soils and climates has produced the changes that now distinguish the plant in different localities. DeCandolle makes three species — *bohea*, *viridis* and *cochin sinensis*. Mr. Fortune found *Thea Viridis* in Fuhkien and Kiangsu, and *Thea Bohea* in Canton; and that green and black teas were made from either, the difference in color depending on the mode of preparation. Green tea can be changed into black by the application of greater heat, but not *vice versa*.

The native names of teas are significant. *Bohea* means from the Bu-i hills, and is not the name of any one kind, for several kinds grow there; though the name is given at Canton to a poor kind of black tea. *Sunglo* is tea grown on the hills in Kiangsu. Among black teas, *Pecco*,[2] or "white hairs," so named from the whitish down of the young leaves, is one of the best. *Orange Pecco*, called Shanghiang, or "most fragrant," differs from it slightly. *Hung muey*, meaning "red plum blossoms," is named from its red tinge. "Prince's eyebrows," "Carnation hair," "Sparrow's tongue," "Dragon's pellet," and "Dragon's whiskers," are translations of other names. *Souchong* means "little plant," *Pouchong*, "carefully packed," *Campoi*, "carefully fired." *Chulan* is scented with the flower of that name. Gunpowder, in Chinese *Machu*, is "hemp pearl." *Tachu*, "great pearl," and *Chulan*, "pearl flower," are two kinds of Imperial. *Yu tsien* means before "the rains," denoting young, tender leaves; it is also called *Hichun*, "flourishing spring." *Twankey* is the name

[1] Doolittle's *Social Life*, etc., Vol. 1, p. 48.

[2] Pekoe.

of a stream in Chehkiang. *Oolong*, "black dragon," is a black tea with the flavor of green, brought from a place so named.

The leaf is dark green, of an oblong oval form, and the flowers are white, single and inodorous. The seeds are like hazel-nuts in size and color. One husk contains three. They yield an acrid and bitter oil. The annual produce of a large plant is from sixteen to twenty-four ounces of dried leaves, but the common average is not over six; and one thousand square yards contain from three hundred to four hundred plants. There is so much difference in the flavor of plants raised in adjoining localities, that rich Chinese tea-drinkers are as particular to know the place they came from as German wine-drinkers to know the name of the vineyard that produces their supplies. They sometimes pay $15, or even $100 per pound, for choice kinds.

Mode of Curing. The quality depends as much on this as on the soil or the age of the leaf. The flavor of some sorts is quite changed during the process of drying. The leaves are first sorted, and the useless ones thrown away; then they are spread thinly on bamboo trays, and dried in the wind until they grow soft. They are now rolled and rubbed till red spots appear; from the labor of this process it is called *Kung fu*, or worked tea, hence the name *Congo*. This process is omitted in some of the cheaper sorts. They are now sprinkled on a heated iron pan, till each leaf pops, and they are brushed off before they become charred. One man turns and stirs them, while another tends the fire. The heat forces out the oil, and the leaves, cracked and softened, are rolled on tables made of split bamboo, with the round side upward, to drive out the oily green juice. They are now shaken out loosely on basket trays, and dried gently in the air. After this, they are thrown in larger quantities into the pans a second time, and subjected to a lower heat, being stirred the while, that all may dry alike, and none be scorched. This makes them curl more closely, and as they grow hotter, they are stirred and tossed up till completely dry. This usually takes an hour. Sometimes they are placed over a covered fire of charcoal, and dried there for two or three hours, which makes the leaves darker than when rapidly dried in pans; or, instead of being returned to the pans the second time, they are scattered on a fine sieve held over the fire, and slowly turned over till thoroughly dry. Then the fine and coarse leaves are separated by a larger sieve. This mode of drying leaves them with a greenish hue, but the common black sorts are sometimes left in the sun after firing for a longer time, till partial decomposition sets in. When intended for exportation, a longer rolling and stirring in the pans is required, to prevent them becoming mouldy on the voyage, than when they are to be used at home. The delicate flavor of *Pecco* and other fine kinds would be spoiled on the hot pans; so they are dried in baskets, after careful rolling. The round pellets of Gunpowder tea are rolled up singly while yet damp. When over the fire for the last drying, tuberoses, jessamines, olea, aglair, and other fresh flowers are placed on a basket beneath, and the tea stirred in another basket over them, so as to impart to it an aromatic flavor. The tea must be packed immediately to preserve it. Only the finer kinds are thus treated. Green tea is cured

more rapidly over the fire than black, but throwing the leaves into red-hot pans and then exposing them to the sun, and drying them over a slow covered fire, makes them black. It must be expected, however, that when so many men, over so wide an extent of country, perform this work of curing, there will be considerable variation in the process.

Packing. The finer sorts are enclosed in canisters or small paper packages, and packed in boxes lined with lead; but the common kinds are packed simply in tubs and boxes. At Canton the tea has often to be repacked. In such cases it is fired again — for so they style the process of drying it over the fire — and put up in chests such as go abroad; but much of it reaches the interior of America or New South Wales in the original packages that started from the interior of China. The making of the chests, lining them with lead, and conveying them to the ship, furnishes employment for thousands of carpenters, painters, plumbers, printers, boatmen, and porters, besides those who roll, sort, and cure the tea. It is a wonder that, after so much labor bestowed on it, some of the cheaper sorts are sold to the foreign merchant at Canton, more than one thousand miles from the place where it grew, for eighteen cents a pound.

There is comparatively little adulteration. In selecting teas, the color, clearness, taste, and strength of the infusion are the principal criteria. Some have thought that the peculiar effect of green tea on the nerves, and its taste, were owing to its being cured on copper; but copper is never used, and cannot contract verdigris over the fire, even if it were. The cause is more likely the larger amount of oil left in it, but it may be due more to an artificial coloring used to give uniformity of color to different lots. Tea is made yellow by being sprinkled in the pans with turmeric, and then with a mixture of gypsum and indigo, or Prussian blue, to impart a bluish tinge.

Use among the Chinese. Mr. Doolittle says[1] that the common beverage of the Chinese is a weak decoction of black tea. It is said they do not use green tea. The poorest of the poor must have their tea, looking on it as a necessity. Neither they nor the Japanese, says Dr. Williams, ever use milk or sugar, but always take it clear, and, if convenient, as hot as they can drink it. They pour boiling water over it and let it stand covered a few minutes. One would be deemed inhospitable if he did not offer a caller some hot tea as soon as possible after his coming; so that tea with the Chinese takes the place of coffee among the people of western Asia. The Mongols press the tea into the shape of bricks, and so carry it with them in their wanderings. In Thibet, barley meal is stirred into tea before it is drank, making a thin gruel. The people there also use a strange mixture of water, flour, butter, and salt, boiled with the tea.[2]

Dr. Williams says that the general use of tea among the Chinese is not injurious, and the idea among any that it is so, is caused by the use of strong green tea; but if the same persons will adopt a weaker infusion of black tea, they will find it harmless.[3] The opening of China to the blessings of Christian

[1] Doolittle's *Social Life*, etc., Vol. I, p. 46. [2] *Middle Kingdom*, Vol. I, p. 196. [3] Do., Vol. II, p. 137.

civilization, resulting from the trade in this article, is one of the most interesting results that ever flowed from commerce.[1]

The Flora of Japan is very beautiful. Mrs. J. D. Davis thus describes it:[2] "Four days we rode over mountain passes and through valleys, among the most lovely scenery I ever saw. Now, at the end of October, when the maples, sumachs, and many other trees are changing their color, the mountains are one continual picture. I have heard much of New England scenery in autumn, but I think the colors on these hills surpass it in the proportion of evergreens, the rich dark background of the cedars and pines setting off the rich varieties of red and yellow in these other trees. In the morning, the hills seemed a perfect flower garden, and for four days our eyes were almost satiated with the diversities of color. It crowned the beauty of the scene when, in some places, we caught glimpses of the snow of the higher peaks above and beyond these glowing hills.

"I enjoyed the valleys also. This month (September) was the rice harvest, and the country was golden with the ripening grain. On the lower levels the women were cutting it and setting up the bundles to dry; still further down they were threshing it, drawing the stalks through something like a coarse comb, which strips off the kernels. Then, at almost every farm-house were great undershot and overshot water-wheels for working the heavy rice-stampers to crack the outer husk of the rice. Up in the colder regions was less rice, but everywhere millet, and beans of all varieties, which form a large part of the food of the people. The beans were either growing or cut down and drying in the fields, or shelled and drying on mats, on both sides of the road in the villages, and in front of the farm-houses."

Among the trees of Borneo are iron-wood, cocoanut, and the tallow tree, which bears a nut that yields very good tallow, used both in cooking and for light. The sugar palm, *Saguenas Saccharifer*, called also *Areng*, yields very good sugar, and all kinds of fruit trees flourish. Rice is a staple production. Paddy is the name of the growing rice plant. Munson and Lyman found the plantain, the pine-apple, rose-apple, shaddock, lime, durian and betel palm among the fruits of Sumatra. Oranges grow on the main land, but not on the island of Nyas. Potatoes and sago are cultivated extensively. The sago groves in the marshes are so dense as to make it dark at noon, and the air is like that in a cellar. Sago and cocoanut milk form the principal food of the Nyas, and making cocoanut oil is their principal business, twelve or fourteen nuts yielding a quart of oil, worth twenty cents. Rice is of the upland species, and is planted twelve inches apart, in May or June, and harvested four months later, yielding from forty to one hundred and fifty-fold. The best yield is one ton to the acre. Sugar cane flourishes, but from it the Nyas make molasses only. Sweet potatoes are plenty, but only enough of coffee is raised for home consumption.

In the spice plantations at Bencoolen, they found the nutmeg tree resembled

[1] See *Middle Kingdom*, Vol. II, pp. 126–137; and *Social Life of the Chinese*, Vol. I, pp. 46–50.
[2] *Life and Light*, 1881, p. 46.

the apple tree at home, but with horizontal branches, and a more acuminated top. The male tree yields only flowers. On the female, flowers and fruit in all stages of growth were found at the same time. The fruit is like the peach, and when ripe bursts open and exposes the nutmeg, partially covered with red mace. An acre yields about two hundred and sixty-six pounds. The clove tree is most elegant in form, and has a flower of most exquisite fragrance. It yields three hundred and twenty-eight pounds per acre. Both trees were introduced by Broff, in 1798.

Rev. L. Grout, in his *Zulu-Land*, gives much information concerning the Flora of that region; and as it lies on the borders of the tropics, and rises to the height of six thousand feet, it is rich and varied in its botany. The trees are seldom very large, and do not grow in what we call forests, but are scattered and small, with occasionally a tree of commanding size. Among trees noted for their wood are the yellow-wood (*Taxus elongata* — a species of yew), the iron-wood, and a laurel (*Laurus bullata*) — the trunk of which is sometimes four feet in diameter and eighty feet in height, and gives off an irritating dust when wrought; the mangrove grows along the shores and furnishes a durable wood for building. There is also lance-wood, of which assegais are made; milk-wood, good for axles; the tamboti, used for gun-stocks, and the red-ivory wood, or African mahogany. The wood of some is hard, and of others soft; of these tough, and of those brittle; yet the leaves of most are evergreen, and many have beautiful blossoms, as, for example, the *Syringa*. There is a great variety of mimosas; but woe to the garments that come too near the branches of the spring mimosa, or thorn tree.

Of fruit trees, the banana is indigenous. Its fruit used to be called the king's food, because the chiefs made it a capital offense for any to taste it without leave. The tree grows twenty feet high, with leaves two feet broad and eight or nine in length, with panicles of fruit weighing thirty or forty pounds. There are several species of fig trees. Sometimes the seed of the *Ficus Africana* is dropped by a bird in the cleft of a species of *Erythrina*, and the roots, reaching down to the ground, gradually enclose, and finally strangle, the original tree; though while it lives, the dark green foliage of the fig affords a fine contrast to the scarlet flowers of its victim. Orange and lemon trees are common. Pomegranates flourish, but apples do not thrive near the coast. Pine-apples abound.

The tall, stiff, succulent-stemmed *Euphorbias* attract the notice of strangers, shooting up forty or fifty feet into the air. They yield an acrid, milky juice, yet the central pith is edible. The castor oil plant (*Ricinus*) grows in old kraals that have been forsaken. In September and October, the south African spring, the fields are covered with flowers of all colors. The lilies are well represented, so are the *Amaryllidæ* and the iris family. The aloe projects its orange flowers above its leafy *chevaux-de-frise*. There are three species of *Cyrtanthus* of surpassing beauty. One *Amaryllis* has a large, almost spherical bunch of scarlet, fringed with white stamens; another (*Hemanthus*) looks like a huge sunflower, only formed of a multitude of blossoms on stalks, surrounded by an involucre. The Natal lily (*Amaryllis Belladonna*) is indeed the "beauti-

ful lady" of the bulbous tribes, and south Africa is the headquarters of the *Amaryllidæ*. From one *Hemanthus* the natives used to get the poison for their arrows. The gladioli family are variegated and conspicuous, but the pride of the Irids in Zulu-Land are the *Ixia*, unequalled for grace and elegance, like pendulous wood grasses bearing flowers. One species on Table Mountain is three feet in height. There are many species of this flat-flowered sedge. One exogenous flower has a large petunia-like white blossom, which covers itself with black lines and patches as it withers, till it merits the name of "Ink plant."

The male fern (*Lastrea athamantica*) abounds, and is among the Zulus a remedy for the tape worm. There is also a splendid climbing fern, with a stem half an inch in diameter, hugging the bark of trees to the height of forty feet, throwing out at intervals of a foot a glossy frond, unequally pinnate, five feet in length, and with twenty or more pairs of smooth lanceolate leaflets from six to twelve inches long. Here, too, grows the beautiful tree fern, *Cyathea Arborea*, with stem ten inches through and ten feet in height, surmounted by a tuft of thirty similar fronds six or seven feet in length. The fan palm grows along the coast, producing the so-called vegetable ivory. Mr. Grout gives a curious description of the *Strelitzia Alba*, too long for quotation.[1] He also describes the wild date and the wild olive.

Harvey estimated the south African species of plants, in 1838, at one thousand eighty-six genera, and eight thousand five hundred species. Now it will not fall short, probably, of eighteen thousand species. The predominating family is the *compositæ*, constituting one sixth of the whole, or one hundred and eighty-two genera and one thousand five hundred and ninety-three species, many of the former and most of the latter peculiar to that land. Next to them comes the *Leguminæ*, comprising nearly six hundred species, two thirds of them in the western provinces. *Indigofera*, *Psoralea*, and *Aspalathus* are its prominent genera. The third great family is the *Gramineae*, embracing ninety-five genera and three hundred and fifty-nine species, only six of the genera peculiar to south Africa.

Certain plants, however, quite limited in their area of dispersion, give distinctive physiognomical features to the country. The chief of these are the *Proteaceæ*, named from the diversity of their genera, which are eleven, with two hundred and eighty-eight species. Their favorite habitats are dry, stony mountain slopes, or sandy regions. After them come the heaths, amounting to four hundred and ten species, which reach their limit at Natal. Not less characteristic are *Mesembryaceæ* and the genus *Stapelia*, and in addition the Buchu family, or *Diosmeæ*, the sorrel tribe and the rope grasses.

Advancing toward Natal, *Proteaceæ*, *Ericas*, and *Restiaceæ* become rarer, and make room for families which merge into its sub-tropical Flora. Everywhere the gigantic *Euphorbia canariensis* is seen, with thorny acacias, the speckboom (*Portulacaria afra*), and a profusion of fleshy plants. These, with the *Strelitzia regina* and *juncea*, the *Tecoma capensis*, the elephant's foot, and the palm-like *Lycadeæ*, or Kafir bread-fruit trees, give character to vegetation. Besides

[1] p. 283.

grasses and compositæ, the most prominent orders are *Malvaceae*, *Capparideae*, *Celastrineae*, *Sarindaceae*, *Acanthaceae*, *Euphorbiaceae*, and *Amaryllideae*, advancing into the still more tropical types of *Rhizophoreae*, *Anonaceae*, *Sterculiaceae*, *Malphigiaceae*, *Connaraceae* and Palms.[1]

Missionaries have not given a great deal of attention to zoölogy, yet it has by no means been neglected. As far back as 1824, Rev. J. C. Brigham gives this information concerning the wild cattle and horses of the pampas of Buenos Ayres.[2]

The cattle farms are very large, some persons keeping as many as fifteen or twenty thousand head of cattle. A large corral, or yard, enclosed by poles inserted perpendicularly in the ground, is formed near the house. At night each one of the peons, who usually number from eight to twelve, places his horse in the corral, ready for use the next morning, and at dawn they ride off among the herd, and bring a portion of it to be counted, and marked, if necessary. They seem to know every animal of their charge, and speak of hundreds of them in the course of an evening, calling each by name. They know a horse also, by his gallop, at a great distance. Sometimes the horses, in the exuberance of their spirits, ran for leagues by the side of the coaches, prancing and snorting, with mane and tail erect; and several times even cattle and sheep, deer and ostriches, joined in the race, though the bird outstripped them all.

The best of the horses are left ungelded, and each becomes leader of a small tribe that follows him alone. Sometimes a bloody battle occurs between two of these leaders. During the fight their respective followings look on, but do not interfere, and after it is over both parties follow the victor. Now and then the vanquished leader renews the conflict with such desperation as to conquer the conqueror. In that case, the whole company follow him as they had done the other, and he is responsible for their defense from tigers and wolves.

When a bull becomes old he follows the herd for a time, at a humble distance; and when he becomes too infirm to do even that, he takes up his abode near a spring of water, and spends his last days in solitude, sometimes living thus till gray, and even white, with age. The venados, or deer, are seen in almost every estancia, in flocks of fifty or one hundred, very little shyer than the cattle; for, though they might readily be killed in great numbers, cattle are so plenty that deer are seldom disturbed. The avestruz, or ostrich, is quite common, and sometimes is domesticated. Its extreme length is five feet ten inches; length from tip of one wing to the tip of the other, when extended, five feet four inches; length of its legs, two feet nine inches. Its color is dark gray, and its plumage not so handsome as its African compeer. Its eggs form a pleasant article of food. There are two kinds of partridges, one of which is often tamed. Wild ducks are abundant, but the variety of wild birds is not great. Mr. Brigham speaks of three kinds of parrots; one of them a small green species, easily domesticated, but seldom living more than three years, while the others live almost as long as men.

In 1833, Rev. T. Coan described the animals of Patagonia.[3] The principal

[1] *Zulu-Land*, pp. 270–288. [2] *Missionary Herald*, 1826, p. 76. [3] *Missionary Herald*, 1834, p. 380.

one is the guanaco, a species of llama, larger than the deer, with long legs and neck. It has cloven feet, and a hump like the camel. Its color is a pale red or sorrel, and white. Its head and ears resemble those of the horse, and it neighs like a colt; but, unlike these, it wears a fleece of long, fine wool, interspersed with longer hairs. Generally slow in its movements, when hunted it is very fleet, and hardly seems to touch the ground. Its flesh is excellent, and, if domesticated, the animal might prove as useful as the ox and cow. It is generally taken by means of the bolas. This consists of three balls covered with hide and attached to leather thongs from four to five feet long, which are fastened together. One ball is held in the hand, and the others whirled round the head till sufficient momentum is gained. When thrown at the legs of the guanaco, it winds around them and entangles it till the hunter comes up and despatches it with his knife. The ostrich is found here as well as in Buenos Ayres, and Mr. Coan speaks of one of its eggs as fourteen inches in circumference, and tasting very much like those of the hen. Lions are also found here, and the Indians use their flesh for food when they can get it.

One chapter of Rev. S. Parker's *Tour Beyond the Rocky Mountains*[1] is devoted to zoölogy. He mentions the elk, the moose, three species of deer, the antelope, the beaver, land and sea-otter, hairy seal, Rocky Mountain sheep and goats, the panther, tiger-cat, wild-cat, and lynx; five species of wolves, four of bears, the buffalo, and many smaller animals. In the next chapter, among fish he describes the salmon, sturgeon, anchovy, and trout. The rock cod made its first appearance at the mouth of the Columbia while he was there. Among birds, he enumerates the white-headed, and golden eagle, three or four kinds of hawk, two species of jay, the magpie, ravens, and crows; two or three species of grouse, and a species of water ousel, which stays under water at least two minutes, moving on the bottom with as much seeming ease as on dry land. The red-winged blackbird and robin remain through the year; swans, geese, and ducks abound in autumn. Black cormorants, and other birds of that genus, are common on the Columbia, among them one splendid species of a violet-green color; with gulls, loons, terns, auks, and petrels. Eleven species of warblers, six of them new, add to the charms of spring. Six species of wrens, three of titmice, and two of nut-hatches, are mentioned. Of seven species of thrush, two are new; of eight fly-catchers, three are new; and of thirteen finches, three are an addition to our ornithology. Four new species of wood-peckers occur out of eight, and one new swallow out of five. He also mentions a large new bulfinch, and describes the splendid Nookta humming-bird.

The only quadrupeds originally found in the Sandwich Islands were hogs and dogs, a small lizard, and an animal between a mouse and a rat. As early as 1823, cattle and goats had been introduced from America, and a few horses and sheep. Women were not allowed to eat the flesh of swine, but in 1824 some missionaries on a visit to Kau noticed an illustration of natural history not usually found in books. A good-sized pig formed part of the social circle round the hearth of their host. At supper he held up his snout and received

[1] pp. 198–211.

his portion from the sisters of the master of the house. After the meal, he drank the water in which they washed their hands; and when, at bed-time, the young ladies lay down on their mats in the same clothes that they had worn through the day, his pigship waited till they were in place, and then very quietly stretched himself between them. So far from resenting the intrusion, one of them pulled the coverlid over him up to his ears, with her head on the pillow by the side of his. The comical picture was too much for the politeness of the missionaries, who laughed aloud; though it did not speak much for the elevation of woman at that early day.[1]

Dr. A. A. Gould, in his volume on mollusca and shells, in connection with the United States Exploring Expedition, acknowledges indebtedness to Mrs. C. Richards and Henry Dimond for rare and valuable shells.

Prof. J. D. Dana, in his volume on geology, in connection with the same expedition, makes frequent acknowledgments to missionaries "for many valuable facts," especially to Rev. T. Coan. He quotes repeatedly from him, and also from Rev. L. Andrews, Dr. G. P. Judd, Rev. S. Dibble, and others. Spending, himself, only five days in the islands, he appreciated the aid of educated missionaries long resident there, and familiar with their natural history. He relies on Rev. S. Parker's *Exploring Tour Beyond the Rocky Mountains* for his account of the geology of Oregon.

Rev. L. H. Gulick, M.D., writes[2] on Ponape, describing its geology and meteorology, its botany and zoölogy. He recorded many species of plants, and gathered one hundred species of shells.

Rev. J. T. Gulick, of North China, wrote[3] "on the variation of species as related to geographical distribution, illustrated by the *Achatinellinæ* types of the Hawaiian Islands *Hellecidæ*. The *Hellicterella* was discovered and described by him.[4] He also published a paper[5] "on a diversity of evolution under one set of external conditions," and another, conjointly with E. A. Smith,[6] describing some species of the *Achatinellinæ*, their habitats and affinities, with an account of a new species, named by naturalists, in honor of him, *Apex Gulickii*. One of these papers was republished in Germany.

Rev. O. H. Gulick, of Japan, has also contributed to the *American Journal of Science*[7] a paper on the volcanoes of Kilauea, Sandwich Islands. Rev. H. Bingham noticed a remarkable shower of meteorolites,[8] and sent home several specimens. Rev. J. Goodrich wrote four papers for the same journal.[9] Rev. C. S. Stewart wrote two articles[10]—one of them was reprinted in the *Edinburgh Philosophical Journal*;[11] and Rev. T. Coan wrote as many as twenty papers for the *American Journal of Science*. Dr. E. R. Beadle, of Syria, was a zealous naturalist, and sent home valuable fossils from Mt. Lebanon. His own cabinet was very rich, and noted for the beauty of many of its shells and minerals. Dr. A. Smith, of Aintab, wrote a number of essays on scientific sub-

[1] Bingham's *Sandwich Islands*, p. 208. [2] *American Journal of Science*, Vol. XXVI, pp. 34–49.
[3] *Nature*, Vol. VI, p. 262, *seq.* [4] Do., p. 406. [5] *Journal of Linnæan Society*, 1872, pp. 496–505.
[6] *Proceedings of the Zoölogical Society of London*, 1873, pp. 73–89.
[7] Vol. XXXVII, p. 416, *seq.* [8] Do., Vol. XLIX, pp. 407–408.
[9] Vol. XI, pp. 1–36; Vol. XVI, pp. 345–350; Vol. XX, p. 228, *seq.*; and Vol. XXV, pp. 199–203.
[10] Do., Vol. XI, pp. 362–376, and Vol. XX, pp. 229–248. [11] (New) Vol. III, pp. 45–60.

jects, several of them for the *Journal of Science.* Dr. W. M. Thomson, of Beirût, wrote, in the *Journal of the American Oriental Society*,[1] on traces of glacial action on Mt. Lebanon.

In his great work on China, Dr. S. Wells Williams gives us a glimpse of its zoölogy. Under *Quadrumani* he specifies *Simia nemoeus*, and adds a description. The Fi Fi, Sing Sing, and Haituh are set before us. Bats, bears, lynxes, wild-cats, and several species of deer pass in review. To the common domestic animals China adds the buffalo, or water-ox. The cat they call the family fox. Game animals are enumerated, and fishes, among them the gold-fish. Chinese birds are described; fly-catchers, grackles, thrushes, and goat-suckers. Larks are called the hundred-spirit birds, and $25 are often paid for a good singer. The swallow, also, is a favorite. Sparrows and crows are common. One crow is blue. There are several species of robins. The red-billed magpie is beautiful, so are the jays. The Chinese call the cuckoo *kuku.* A kingfisher is mentioned, no larger than a sparrow. One kind of parrot is a native of China. Gold and silver pheasants are not now found wild unless in the interior. The *Phasianus superbus* is a magnificent bird. The argus pheasant takes that name from the eye-like coloring of wings and tail. Then there is the peacock pheasant and the medallion pheasant, and the peacock. The *Gallinaceous* order, as partridges, quails, francolins, and woodcocks, are plenty. Doves are reared. Snipes and many kinds of waders, or grallatores, are common; so is the ortolan. The jacana is a native bird. The stork is made an emblem of longevity. Many water-fowl are mentioned, among them the mandarin duck.

The Chinese have several fabulous animals. Among them they describe the phœnix as a kind of pheasant. To the dragon they assign the head of a camel, horns of a deer, eyes of a rabbit, ears of a cow, neck of a snake, belly of a frog, scales of a carp, claws of a hawk, and palm of a tiger. Its breath becomes sometimes water and sometimes fire, and its voice is like the jingling of copper pans, which the Chinese count excellent music.

Speaking of insects, he says the character for bee means, the awl insect; for the ant, the righteous insect; and for the mosquito, in view of the marking of its wings, the lettered insect.[2]

In Borneo, the orang-outang is found. The people turn out *en masse* to hunt wild hogs when they make their appearance, nor rest till they get them into the caldron, quite undisconcerted by their strong odor. They eat all kinds of reptiles — dogs, rats, and snakes — without squeamishness. Singing birds abound, and, among insects, mention is made of butterflies and ants. Mosquitoes are troublesome where there is water. On the shore of Sumatra, Lyman and Munson saw sometimes three or four species of monkeys at once, filling the solitude with their shrill babblings. They swarm also on the islands. Wild hogs are common; snakes not infrequent. Deer of several kinds inhabit the jungles. Among domestic animals are hogs and fowls. Buffaloes have been introduced among the Malays; but the Nyas prefer swine, and as pork is a *sine qua non* in their feasts, it is said they can neither marry the living nor bury the dead without it. Goats abound, and the groves are full of birds;

[1] Vol. X, pp. 185–188.

[2] *Middle Kingdom*, Vol. 1, pp. 247–275.

among them a small green parrot and Java sparrows. The Nyas eat a great deal of the fish and shell-fish that abound along their shores.

Dr. Allen has given a brief notice of the animals and other productions of India,[1] and Rev. F. DeW. Ward, in his *India and the Hindoos*,[2] has done the same. He passes in review the elephant, rhinoceros, wild boar, camel, bear. Then he describes a novel bear-hunt with no weapon but a rope. The bear started toward some men near the edge of a precipice, and almost on its edge stood a young and very elastic tree. One of the men sprang up this tree, followed by the bear. Near the top he fastened a small rope, and let it down to his companion, who drew it down with all his might. The weight of the other, added to that of the bear, who followed close after him, brought the tree down almost horizontally. The man now slid down the rope, which was securely fastened to another tree near the ground, and as soon as the bear began to back down the rope was cut. The tree instantly swung back to its upright position, and hurled the baffled enemy over the cliff, where he was dashed to pieces on the rocks below.

Of the deer tribe, he partially describes the antelope, musk deer, Ceylon deer, Nepaul stag, Tamboo deer, spotted axis, hog deer, roebuck, white oryx, chira, chickara, nylghau, and the Cashmere goat; then the buffalo, Indian ox, Brahminee bull, and wild oxen, such as the ganjal, arnee, and yak. Horses, wild asses, mules, and the dziggetai, that goes in droves in the far north, follow monkeys, the gibbon, entellus, wanderer, and togul; also a few orang-outangs take their turn; after these, bats, porcupines, the sloth, the armadillo, the mangoose, the Bengal loris; and among rats, the ratel. Among carniverous animals, the tiger, lion, panther, leopard, and Nepaul tiger-cat, the jackal, striped hyena, lynx, caracal, ounce, Thibet dog, represent that species. Also the crocodile, lizard, gecko, scorpion, centipede, tarantula, cobra, ticpolonga, whip-snake, anaconda, and boa constrictor do duty for the reptiles. He mentions a tortoise four and a half feet long and fourteen inches high, and gives a humorous account of the insects to be guarded against, and the means of protection. Thirty-five species of birds are noticed, and twenty-four kinds of fish. He tells of the herbarium of the East India Company's museum, containing about nine thousand species, and specifies a few of them, also some of the forest and fruit trees; and alludes to the mineral wealth of India, her useful metals, and her precious stones.

Rev. S. F. Fairbanks, D.D., of Ahmednuggur, a devoted missionary, is also a zealous naturalist. He is both an observer and discoverer, and a thorough botanist; but his chief contributions have been to ornithology and conchology. He has described various birds, and discovered quite a number of shells. Conchologists have given his name to several species. Mainly through his labors, the number of species in one genus became so great that a new one was formed, to which the name Fairbankia was given. He wrote papers on the Rotella, in the *Annals of the New York Lyceum* for 1853 and 1858. He addressed the American Oriental Society, in 1871, at Boston, in reference to his collections of natural history, then in their hands, which had been of much use to the scientists engaged in the geological survey of India.

[1] *India, Ancient and Modern*, pp. 14–17.

[2] pp. 27–62

And here the writer cannot refrain from making some extracts from a letter just received from Dr. Fairbanks. He says: "Natural science has afforded me all along the most restful and healthful recreation, and if, without it, I had lasted so long, I surely should not have retained such cheerfulness and vigor. Several years ago, feeling the need of rest, I gave so much time to overhauling and arranging my collections, that Mrs. Fairbanks asked me if I was not giving too much time to them. Seeing how she felt, I said, 'Well, dear, if you think so, I will not touch them again till you think best.' Three weeks had not passed, however, before she brought a box of shells to me, saying, 'I was mistaken, you need them; you are getting run down. I won't complain of them again.' She often went with me in search of ferns on the Palani hills. Such excursions made us strong.

"I began collecting shells for Prof. Adams, of Amherst, in 1850. First, I sent him thirty-three species from Bombay. He replied, telling me how to find more; and my next remittance comprised one hundred and sixty species. I continued to collect till I had three hundred and forty-one species. Pfieffer named a *Bulimus* found on the hills near Ahmednuggur, *B. Fairbankii*. Then Benson, long the prince of Indian land conchologists, described several of my new shells in *The Annals*. W. T. Blanford, his successor, published an account of many more that I sent him from the Palani hills. Of one, *Dipplommatina Fairbankii*, only three specimens were found, and two of those were destroyed by the breaking of a vial on my journey home. Blanford also named the second species of *Opisthostoma* which I found on a square rod of the hillside at Khandale, *O. Fairbankii*. I afterwards obtained it alive, and Blanford and I saw its operculum. Three of these shells would lie loose in a mustard seed, and yet it is of a most remarkable form, like a scotched snake in a twist. The first species of the genus were found by the Blanfords, on the Nilagiris, and all but one were lost by the foundering of the ship in which they were sent home. Blanford named a genus of estuary shells in Bombay, *Fairbankia*. Nevill has called another that I sent him, *Mangelia Fairbankii*. Though I have published nothing but an imperfect list, these names have introduced me to the students of Indian conchology.

"My attention had been previously given to the botany of this Presidency; and though I still find new plants, I know the names, habits, and uses of the plants of the Dakhan, and prepared a key to the natural orders of the plants of the Presidency, in the style of a similar key in Wood's *Botany of United States of America*. This was printed by the government, as it supplied a lack in Dalzell's *Bombay Flora*. On the Palani hills I collected one hundred and fifteen species of ferns. One of them was named by Mr. Beddome, the author of *The Ferns of India*, *Lastraea Fairbankii*.

"In 1864, driven for three months to the Mahabuleshwar Sanitarium, I took up ornithology, and entered with interest into the collection and study of our birds. Since then, the pursuit of birds, mammals, and reptiles has prompted to the exercise my health requires. Five years since, I prepared a *Popular List of the Birds found in the Marathi Country, with Short Notes*, which government published in the *Bombay Gazetteer*. This gave the English, native, and scien-

tific name of each, with notes on locality, habits, song, oölogy, etc. Afterwards my strictly scientific lists of the birds of this district were published in *Stray Feathers*, our Indian ornithological journal. On the Palani hills I found two new birds, *Callene Albi-ventris*,[1] and *Trochalopteron Fairbankii*.[2]

"Two years ago I prepared lists of our reptiles, and of those of Gujerat and Sindh, which were published in the *Bombay Gazetteer*. Then, last year, while engaged in special famine duty, I described the thirteen species of rats and mice of this region, especially those in the fields, which that year destroyed half the crops over several thousand square miles.[3] So my recreations resulted in several contributions to natural science."

Rev. H. J. Bruce has made a complete collection — eight hundred specimens — of our birds, and presented them to the museum in Springfield, Massachusetts; also to the cabinets of Amherst College, Mt. Holyoke Seminary, and Abbott Academy, Andover. There is an article from his pen on Indian birds, in the *American Naturalist*, Salem, Massachusetts, 1872; but his greatest contribution to science is his *Anatomy, Human and Comparative*, printed first in English by his children,[4] and then translated into Marathi. Government took most of the edition of three thousand copies for the libraries of its public schools.

Rev. George Champion, of South Africa, was a zealous naturalist. He writes in Silliman's *Journal*[5] on the scenery, topography, botany, and geology of that region; and Rev. L. Grout[6] treats with some fullness, besides these, of the zoölogy, ornithology, entomology, and herpetology of Natal.

The lion is found in the interior of the country. The leopard is more common near the coast, disposed to retire if he sees one coming, but a terrible foe if only wounded by his assailants. They are taken in traps and pitfalls. The tiger-cat, though nearly as tall, is not more than half as heavy, and, like the leopard, loves fowls. The civet cat, or genet, has the same taste for chickens. A kind of fox prowls at night, and so does the howling hyena, who acts as scavenger for lordlier beasts, though sometimes he kills his own game. The cattle, when attacked by wild beasts, form a ring, with the weaker in the center and the boldest on the outside of the circle. The wild dog, called by different names, as *Hyena picta*, *Canis pictus*, *Hyena venatica*, *Lycaon tricolor*, is a savage brute, with a large blackish head, a white ring round the neck, and a shaggy, mottled body. They go in packs, and make sad havoc among cattle. The buffalo is found in the mimosa forests and jungles. The elephant is still found in Zulu-Land, though so mercilessly hunted; also two species of rhinoceros, one white, the other black and the larger of the two, with two horns. The hippopotamus finds a home in some of the rivers. There are two species of wild hogs, very destructive in maize fields, and caught in pitfalls; also an earth-pig, or ant-eater, who thrusts his long snout, and longer tongue, into anthills, and swallows the inmates at his leisure. The porcupine (*Hystrix cristata*) is no stranger here, and rats and mice rejoice in the absence of the cat. Monkeys and baboons inhabit the jungles.

[1] Fairbanks.
[2] Blanford.
[3] *Missionary Herald*, 1879, pp. 389-390.
[4] 12mo, 264 pp.
[5] Vol. XXIX, pp. 230–236.
[6] *Zulu-Land*, Philadelphia, 1865, pp. 351.

There are many species of the antelope. There is a blue buck scarcely larger than a rabbit, and the oribi, or ourebi, weighing about thirty pounds, and making good venison; also an eleotragus, of a reddish fawn color, with long ears, large eyes, black horns a foot in length, curved forward and annulated, hair long and tail bushy; it weighs from eighty to a hundred pounds. Another red buck is a little larger, and a large dark brown one of similar size. Along the coast is a small red bush buck, also the graceful steinbuck, and now and then the blesse buck. Then there is the harte beest, the eland, and the kudu (*Strepsiceros capensis*). The gnu sometimes visits Zulu-Land in winter.[1]

The rivers are too rapid to contain many fish, but reptiles abound. The alligator occupies some of the rivers, as Mr. John A. Butler found to his cost, when one seized him by the thigh in crossing the Unkomazi; and though the victim held on to the horse's mane with a death-grip till he floundered into shallow water, where the natives speared the assailant, yet he carries the marks of five of the teeth of the reptile to this day. A foot square of flesh and skin was torn from the flanks of the horse. The iguana is a monstrous aquatic chameleon, two feet long, with a tail of three feet. There is a land animal of the same stamp, said to milk the cows.

Of snakes, the python (*Hortulia Natalensis*) is the largest; eighteen or twenty feet in length, able to swallow a goat entire. The imamba, though much smaller, is more dangerous. Its bite is fatal. Yet, when one was slowly crawling through a hole in the wall of the house, one of the missionary ladies held it by the tail while her husband went round outside and broke its head. One of them advanced to attack Mr. Grout on horseback, who by a free use of the whip escaped. There is a flame-colored serpent seven feet in length, with a fin-like crest,[2] said to be very venomous, and a kind of cobra di capello. Then the vipera caudalis will lie in the path, and notify you of his presence by his hissing. A smaller one is echidna inornata. The dark glossy umanjingelana sometimes creeps into beds, as well as houses. Besides these, he mentions the inyandezulu, a slender green snake, the umzinganhlu, the ivuzamanzi, a black water snake, the ifulwa, a green water snake, the ukokoti, long and yellow, the inkwakwa, reddish, and the umhlwazi, long and greenish brown. Mr. Grout gives a description of the poison and poison fang, and the remedies for those who are bitten; also a list of lizards, and an account of the chameleon, with a native tradition of the fall, in which that animal has a prominent part.[3]

In describing the insects, he mentions among the *Orthopterous:* locusts, grasshoppers, the phasmidæ, or specter insects, crickets, butterflies, cicadas, bees, and ants; the white ant holding a position between orthopterous and hymenopterous insects; the common brown ant, from which nothing is safe that is not isolated by tar; ticks, spiders, moths, and the ant lion (*myrmeleon*).

Among birds he specifies pheasants, partridges, quails, teal, wild ducks and geese, wild bustard, koran, Guinea-fowl, snipes, storks, cranes, and pelicans; a large black eagle, falcons, kites, hawks — among them insect hawks — and owls; two species of vulture, and the crow. In the bush are parrots, toucans,

[1] *Zulu-Land*, pp. 289–304. [2] The inhlonhlo. [3] *Zulu-Land*, pp. 305–319.

lories, king-fishers, wood-peckers, the sugar-bird and canary, and the long-tailed Kafir finch. The secretary bird is described, and the honey-bird, and a beautiful crescent-necked dove, called ijuba.[1]

Rev. J. L. Wilson affirms that no richer field for the study of natural history exists than western Africa. The most common wild animals are: the elephant, buffalo, tiger, wild boar, many varieties of monkeys, apes, orang-outangs, or chimpanzees, antelopes, gazelles, jackals, the genet, civet cat, porcupine, hippopotamus, crocodile, boa constrictor, and many other reptiles. The woods abound with birds of every variety and of the richest plumage; among them, the grey parrot, the green parrakeet, whydah bird, flamingo, crown bird, trumpet bird, wild pigeon, ringdove, quail, wild hen, and Guinea fowl. The rivers and bays teem with a great variety of fish, and the field of entomology is unlimited in extent and variety.

The Pangwes destroy whole droves of elephants by enclosing them with a vine which they dislike exceedingly, and then scattering poisoned plantains among them. The elephants will not break over the vine, and, when weakened by the poison, are killed with spears. Sometimes, some of the hunters are killed in the encounter. The flesh of elephants is not only eaten fresh, but dried also, and is highly esteemed. They, at some seasons, destroy large fields of plantains and bananas in one night, and the natives are glad to frighten them away by beating old brass pans, rather than run the risks of a battle. African elephants are never tamed, but one hundred tons of ivory are exported annually from the Gaboon, involving the slaughter of about eleven thousand elephants.

The African tiger, or leopard, is very formidable, and is held in superstitious dread as another form of wicked men, who have power to transform themselves into this animal. Women are frequently killed by them, children carried off, and whole villages abandoned by the people in their terror.

More formidable still is the njena, or troglodytes gorilla. This animal was first discovered by Mr. Wilson. In 1846 he found the skull of one, which he saw at once belonged to an undescribed species. After some search he found another; the natives, he learned, were familiar with the animal, and described its size, its ferocity, and some of its habits, and promised in due time an entire skeleton. The information obtained awakened great interest among naturalists. Since then, perfect skeletons have been taken both to England and France, as well as our own country. It belongs to the chimpanzee family, and is the largest and most powerful species known. Its aspect is hideous, and its muscular power amazing. Its face is intensely black and savagely ferocious. Large eyeballs, a crest of long hair, which projects forward when angry, an immense mouth, full of terrible teeth, and large, protruding tusks, make it thoroughly frightful. The natives, even though well armed, avoid it. The skeleton Mr. Wilson presented to the Natural History Society of Boston is five and a half feet high, and is not far from four feet across the shoulders. The animal invariably attacks a man when he appears alone. It will wrench a gun out of his hands and crush the barrel between its jaws. Mr. Wilson saw a man,

[1] *Zulu-Land*, pp. 320–331.

the calf of whose leg was bitten off by one of them, and who would have been torn to pieces had not his companions come to his help.

The boa constrictor is found throughout western Africa, especially in thick jungles along the streams. Mr. Wilson has seen one twenty-five feet long, and they are said to grow much larger. He once helped to extricate a favorite dog from the folds of one of them, and, though no bones were broken, it took a week or two to get rid of the varnish with which the reptile had covered the dog, preparatory to deglutition. Some tribes eat the flesh of this serpent.

Mr. Wilson gives an interesting account of two species of African white ants. One builds turreted domes of clay, eight or ten feet in diameter and ten or twelve feet high, surrounded by half a dozen conical turrets, and with a wonderful arrangement of recesses and cross streets in the interior. Near the center is the palace of the queen, who is ten times larger than the rest, and almost incapable of locomotion, but is well guarded by faithful soldiers. The mound must be demolished with great haste, or she is carried off. The ants are about a quarter of an inch in length, with very sharp pincers, and their bite seldom fails to draw blood. They are very pugnacious if their dwelling is invaded. Break off one of the turrets, and instantly one mounts the breach, surveys the damage, and in two or three hours the injury is repaired by several hundreds of laborers, who deposit their mouthfuls of clay with geometric precision. There is no opening above ground; all their movements are subterranean.

The other species are not so bellicose, but prey on furniture, clothes, books, and the wood of buildings. They are smaller than the others, and have no weapons apart from the disagreeable odor they give out when disturbed. They build no mounds, but make their nests under ground, and from these they issue at night on their forays. Entering a box of clothing, they first cut holes through the whole mass from top to bottom, as if to render it useless in the shortest time possible. Sometimes they feed on the inner edge of books for days, before their presence is suspected. No box of books or clothing is safe on the floor for a single night; it must be insulated by water or pitch. They build a covered arch-way to the point they wish to attack, at the rate of two or three inches an hour. Break it down, and they immediately rebuild. Do this twenty times, and twenty times they will renew it. Their perseverance is indomitable. Nothing but arsenic will compel them to desist; even then, they sometimes build another tunnel along-side of the poisoned one. A wooden post is sometimes eaten entirely hollow by them, while the outer surface remains unbroken.

There are also black, or dark brown, ants, called "drivers" (*termes bellicosa*), which attack every living thing that comes in their way. They move by day and night, in trains sometimes half a mile in length, when they change their abode or go in quest of food. Pioneers are sent forward to explore and give note of danger. That given, the soldiers instantly rush to the spot, while the rest stop or turn back; and when the danger is past, all move on again. When about to cross a path, the soldiers form an arch of their bodies, under which the rest cross in safety. The arch is made by interlocking feet, one ant

standing upright on one side, another on the other, and a third stretched across between them, and so extending indefinitely. Mr. Wilson has often raised sections of the arch from the ground by inserting the point of his cane; and though they held together for a time, when they saw how matters were, instead of dropping to the ground, they made for his fingers at the other end of the cane. When disturbed in this way, the soldiers attack the intruder, and bite unmercifully, so that a horse can scarcely be forced through the swarm; and a dog clears them with a bound, glad if even so he does not get them on his feet, and, in trying to detach them thence, feel their pincers on his lips.

If they find a dead body, they do not leave it till every morsel is consumed, even though it be an elephant, and furnish them work for several days. They even attack living animals; and a horse or cow in a stable would be harassed to death in a few hours, and its bones be clean in less than forty-eight hours.

They ransack every nook and crevice of a house, and no insect, however small, eludes their search. Mice are overpowered by their numbers, and nothing is left but a little hair and some bones. The family may have to flee, but in a few hours they may return and find their house empty, if not swept and garnished, and the floor strewed with the wings of cockroaches. Even men, if unable to move, and there is no one to move them, are sometimes devoured. Mr. Wilson has seen them, in crossing a small stream, where the current would have swept them away singly, fasten themselves together into rafts, and contrive to cross so as to strike some projecting point on the opposite shore, where the living raft broke itself up and joined the column as it re-formed for the march.

Rev. H. J. Van Lennep, D.D., in his *Bible Lands*,[1] gives much valuable information on the geography and natural history of western Asia, arranged as follows: Physical characteristics of the country; water — life upon it and in it; cereals, horticulture, vineyards; trees, flowers, fruits; domestic animals; wild animals; scavengers, both beasts and birds; birds of passage; reptiles and insects. The following beautiful description is taken from page 250:

"We have repeatedly taken our stand on some isolated cliff at the edge of a plain, to study the varied sights and sounds of an Oriental summer's eve. The day may have been still; even the voice of the birds hushed by the heat, and only the monotonous concert of the 'cicada' heard from the shady groves. This also grows silent as the mountain shadows lengthen and the sunlight dies away. The rays of the moon are hardly perceptible ere the song of the cricket begins. The cry of a solitary jackal sounds from the edge of the wood, and is answered first by one, then by another and another of his companions, till the grand chorus echoes from the hills. The fox barks close by; the owls screech, and the great owl in the wood utters its mournful cry, as it watches for the hare darting through the shadows. We can hear the steps, and now and then catch a glimpse, of a herd of wild boars, hastening from the woody coverts of the mountain to wallow in the mire of the marsh or dig among the roots of the plain. It seems as if nature were keeping Ramazan — fast asleep all day, and waking at eve to spend the night in revelry. But when a panther is in the

[1] New York, 1875, 8vo, pp. 832.

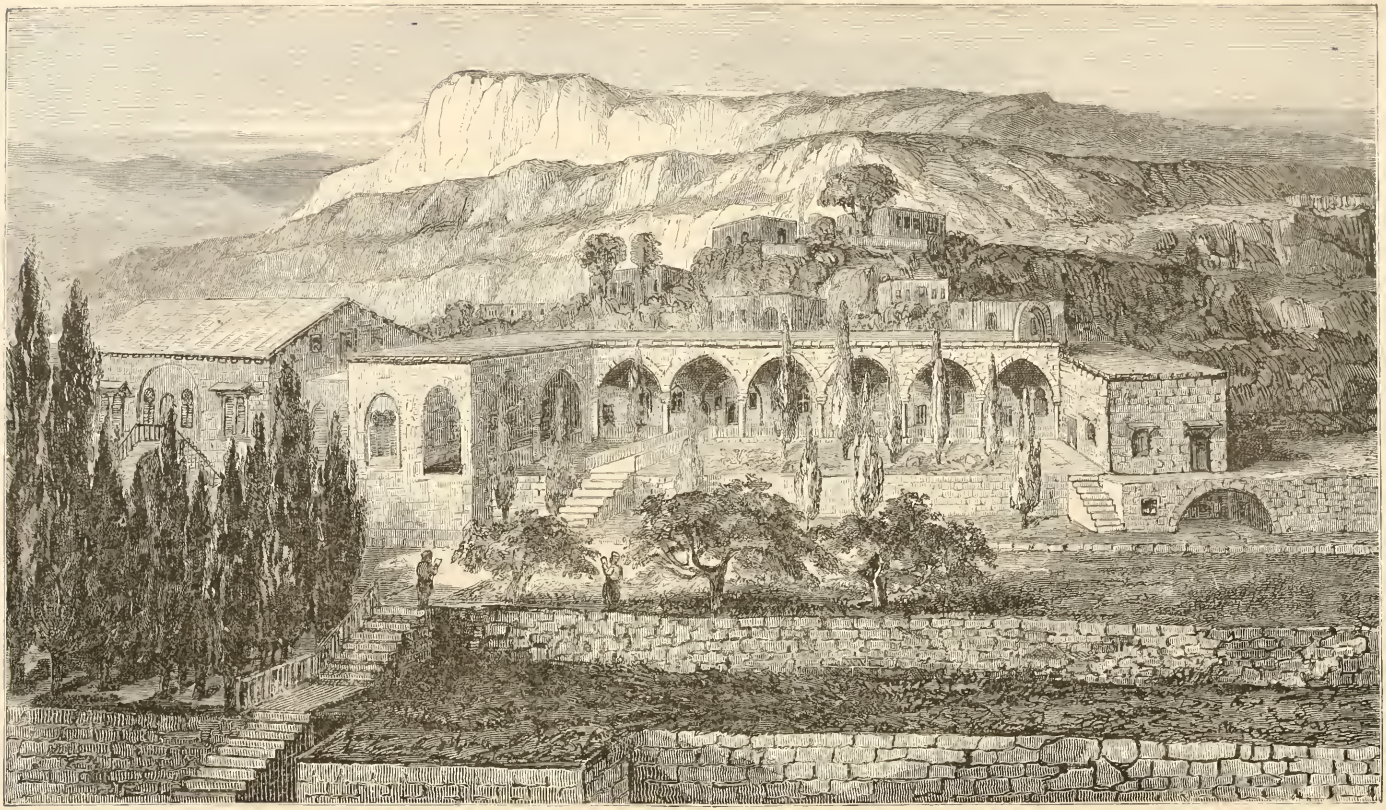
vicinity, it is as if the scent of blood filled the air, telegraphing the danger to every creature. The evening may be even more beautiful, but as the song of the cicada dies away, and that of the cricket succeeds, the horses and cattle hasten home, and those without shelter gather together in anxious groups. No wild hog hastens to luxuriate in the marsh; no jackal or fox utters a cry; not a sound breaks the stillness. All seem resolved to fast rather than by any movement to draw the attention of the common foe, who they well know is stealthily seeking whom he may devour."

Dr. Van Lennep's valuable collections in natural history, and manuscript lectures on natural science in Armenian, were burned with the mission house in Tocat, March, 1859.

We are indebted to Rev. W. M. Thomson, D.D., for an interesting account of the locust. In 1837, on the hill-side not far from Ain el Barideh, on the western shore of the sea of Galilee, he noticed something very unusual, and, on riding up to see what it was, to his amazement, the whole mass began to stir and roll down the declivity. His horse was so terrified that he had to dismount. It was a swarm of locusts too young even to jump. They looked like minute grasshoppers, in countless numbers, and, in their efforts to get out of his way, rolled over and over like a layer of semi-fluid lava, an inch or two in thickness.

Early in the spring of 1845, they appeared along the lower spurs of Lebanon, on the western side. Having laid their eggs, they disappeared; but the people looked forward with fear to the time when they would be hatched. Toward the end of May, millions of them were on their march up the mountain, and at length they reached the lower edge of Abeih. Summoning all the men he could muster, Dr. Thomson advanced to turn them, if possible, from the village. He had often passed through clouds of them in the air, but these were without wings — about the size of grown-up grasshoppers. The whole surface was black with them. On they moved like a living deluge, setting the laws of gravitation at defiance; for it flowed uphill, and struck the beholder with a vague terror. They dug trenches and dragged timbers along the bottoms of them, crushing all in the trenches; they kindled fires to burn them; they beat them with poles; but all in vain. The living wave poured up the rocks and walls, covering everything, those behind filling the places of the slain as fast as they were vacant. After a long contest, he went down the mountain to see how long the column was, but he could see no end to it; so, tired and discouraged, he abandoned the struggle. Next morning the column had reached his own premises, and, hiring half a score of men, he resolved at least to defend his garden, and, by dint of great exertion and constant fires, he succeeded in a measure; but it was appalling to watch that living river flow up the road and climb the hill. At length, worn out with ceaseless toil, he gave up the battle, and, carrying the choicest flower-pots into the parlor, he surrendered the rest to the enemy, and for four days they moved in solid phalanx up the mountain.

In early spring they deposit millions on millions of eggs in the warm soil. This done, they vanish like morning mist, and in six or eight weeks the very



THE ABEIH SEMINARY

dust seems to become alive and begin to creep. Soon they assume the form of grasshoppers, and, moving with one impulse in the same direction, begin their destructive march. In a few days their voracity ceases, and, like the silk-worms, they fast, and repeat their fast four times before they assume their wings. Yet when they eat, they devour every green thing. A large vineyard in Abeih was green in the morning, at night it was naked as a new-plowed field. The noise made in marching and devouring is like the noise of a heavy shower among the trees.

Joel says,[1] "He hath laid my vine waste and barked my fig tree. He hath made it clean bare; the branches thereof are made white." They strip the vines of every leaf and berry, even of every green twig. Many large fig orchards were "clean bare," not one leaf remaining; and, as the bark of the fig tree is silvery white, their bare branches were "made white" under the burning sun. Joel says,[2] "Is not the meat cut off before our eyes?" and here whole fields of grain disappeared like the shadow of a dissolved cloud, and the hope of the husbandman vanished like smoke. The prophet says, "The herds are perplexed; the flocks are made desolate."[3] This is literally true. Not even a goat can find a green thing in such a desolation. "The land is as the garden of Eden before them, and behind them a desolate wilderness; yea, and nothing shall escape them,"[4] are words that involuntarily rise to our lips when we look on such desolation. "They shall climb the wall like men of war; and they shall not break their ranks."[5] When the head of the column reached the wall of the castle of the Emir, they did not go round it; they marched right over it; and so, in spite of all his efforts, they climbed straight up the walls of the residence of Dr. Van Dyck, and passed over the roof with unbroken ranks. "They shall enter in at the windows like a thief."[6] It was only untiring vigilance that saved the contents of the flower-pots carried into the house.

Some find difficulty in Nahum (iii: 17), but in the cool evenings at Abeih they literally camped in the hedges and walls, covering them like a huge swarm of bees; and when the morning sun grew warm, they resumed the march. One day was unusually cold, and then they scarcely left their camps; indeed, many did not move at all till the following day; those that did seemed cramped and stiff, but in the heat their movements were brisk and lively. So cool days prolong their stay, but under the hot sun they literally "flee away." Even those that have no wings manage to disappear. Yesterday the whole earth seemed in motion; to-day there is not a locust to be seen.

David complains that he was "tossed up and down as the locust."[7] These flying squadrons are tossed up and down and whirled about by the changing currents of the mountain winds. Solomon says,[8] "They have no king, yet go forth all of them by bands;" and nothing about them is more striking than the common instinct with which all of them pursue the same line of march. Moses said to Pharaoh,[9] "They shall cover the face of the earth so that one cannot see the ground;" and that picture was so stamped on the brain of Dr. Thomson that for nights he could not close his eyes without seeing the whole earth in motion, and could not rid himself of the unpleasant image.[10]

[1] i: 7. [2] i: 16. [3] i: 18. [4] ii: 3. [5] ii: 7. [6] ii: 9. [7] Psalms cix: 23. [8] Proverbs xxx: 27.
[9] Exodus x: 5. [10] *The Land and the Book*, Vol. II, p. 102–108.

VII.

ARCHÆOLOGY.

Among the benefits which missions have rendered to science are their contributions to archæology. This may be defined, the science of antiquities, including in that all remains of ancient times, whether ruins, inscriptions, coins, or literary productions. All missionaries cannot contribute to this science, for some labor among nations without history or ancient monuments. Only those having both, possess materials for such contributions. Moravian missions could add little to archæological lore, but the American Board has labored among some of the most celebrated nations of antiquity. Its field of operation includes the primeval Paradise and the mountains of Ararat. It has had one mission at Nineveh, another in Jerusalem, and a third in Athens. It has preached the Gospel in Antioch, has a theological seminary on Lebanon, and relighted more than one of the candlesticks of the seven churches. It has labored at the home of Zoroaster in Persia, and among the ancient civilizations of India and China.

The intelligence of our missionaries qualifies them for such investigations, while their permanent residence among these relics of the past, and familiarity with the languages of these countries, give them great advantage over the passing traveler. They can obtain accurate information on the ground, about discoveries made by others. When gold coins of Philip and Alexander were dug up at Sidon, in 1853, specimens were sent home by our missionaries. When the sarcophagus of the Phœnician king, Ashmunazer, was discovered, January 20, 1855, they sent transcripts both to American and German *savants*.[1] At Mosul they not only described the excavations of Messrs. Botta, Layard, Rawlinson, and Loftus,[2] but filled the Assyrian rooms at Amherst, New Haven, Williamstown, and elsewhere, with specimens of sculpture and inscriptions from ancient Nineveh, which we may study for ourselves.

An ancient Assyrian seal is described in *Dr. Grant and the Mountain Nestorians;*[3] also an earthen vase and Assyrian copper bust found by Dr. Grant in Salaberka.[4] Dr. Justin Perkins gives an account of Nimrûd and Khoyunjik,[5] and of Susa, or Shushan.[6] Dr. Henry Lobdell makes us acquainted with Mr.

[1] *Journal American Oriental Society*, Vol. V, pp. 228–230; *The Land and the Book*, Vol. I, pp. 198–202.
[2] *Missionary Herald*, 1845, pp. 40–42; *Bibliotheca Sacra*, 1848, pp. 148–154.
[3] *Dr. Grant and the Mountain Nestorians*, pp. 289–290.
[4] Do., p. 186.
[5] *Missionary Herald*, 1850, pp. 57–59; *Journal American Oriental Society*, Vol. II, pp. 112–119
[6] Do., Vol. III, pp. 490–491.

Loftus's excavations at Khoyunjik, Warka, and Mugheir.[1] He speaks of his journey from Arbeel to Herir as the first made by a Frank; but Dr. Grant passed over the same route twelve years before,[2] and saw both the Assyrian pillar at Sidek and the kelishin[3] at the top of the mountain beyond, on June 11, 1842.[4]

Rev. D. O. Allen's account of the mode of building a temple at Kaygaum, in the Marathi country, shows how missionary observation may illustrate archæology.[5] An inclined plane of earth was made to follow the walls as they rose, and the interior was filled up in the same way. Up this slope two or three hundred men drew one stone at a time, in a low car with wheels of solid wood. So mound and wall rose together, till the top stone was put in its place, and then the mound was cleared away, disclosing the perfect temple. Was this the way that the huge blocks in Nineveh and Baalbec were raised to their places?

Missionaries, however, can only attend to antiquities in the intervals of leisure from more important duties. Dr. Lobdell writes to his teacher and biographer,[6] "It is only as a recreation from severe missionary labor that I can justify myself in exploring the geography, history, and effete religions of Assyria. I never regret that God has cast my lot in Mosul as a missionary rather than as an antiquarian." These sentences occur in the preface to his notes on Xenophon's *Anabasis*, that fill twenty-four pages, describing the cities, arms, dress, and customs of the people, the modes of travel, measures of distance, and modes of crossing streams; making his personal acquaintance with modern Assyria illustrate the description of it by the Greek historian twenty-two hundred and eighty years ago.

Prof. W. S. Tyler, in his introduction to the notes on the *Anabasis*, after stating that classical and sacred geography, history, and antiquities are greatly indebted to missionaries, and giving some reasons for the superior accuracy of their knowledge, goes on to say that Dr. Lobdell added to these peculiar personal qualifications of his own a quick eye, an almost intuitive sagacity, a curiosity never sated, an activity that never tired, and a marvelous power of concentration, that enabled him to carry on many labors at the same time.

The quarries that furnished the limestone blocks for the palaces at Nimrood were discovered by him, and he prepared forty-seven boxes of archæological specimens with his own hands, to be sent to this country. These spoils from ancient Nineveh will instruct our educated youth in archæology through coming ages. Even the sight of them kindles an enthusiasm in young men for such studies; so that Dr. Lobdell could not in any other position have done so much for this branch of science. Just before his last sickness, he was preparing to write for the *Bibliotheca Sacra* a full account of his journey from Nineveh to Babylon and back.

Missionaries lack, also, the learned and costly books of reference needful to the highest attainments in archæology. Nor are dissertations on such themes

[1] Do., Vol. IV, pp. 472–480; Vol. V, pp. 268–270.

[2] *Dr. Grant and the Mountain Nestorians*, pp. 219–225.

[3] Green pillar.

[4] For a further account of it, by Rev. D. W. Marsh, see *Missionary Herald*, 1850, p. 411, and by Dr. Perkins, *Journal American Oriental Society*, Vol. II, p. 76; also by Dr. A. H. Wright, Do., Vol. V, pp. 262–263.

[5] *Missionary Herald*, 1836, p. 302.

[6] *Bibliotheca Sacra*, 1857, p. 231.

suited for the pages of a missionary periodical, though, as we have seen, the journals of learned societies eagerly avail themselves of contributions to their pages from missionary pens.

The popular nature of this volume limits us to the briefest mention of some of the more interesting of these, though this brevity may make them still less adapted for general reading, while they must fail in that minuteness of detail which scholars require in such matters. To remedy this, references will be given to the original sources of information.

Rev. Isaac Bird[1] gives an account of a tower in the island of Jerba, off the southern coast of Tunis, where, after a battle on the 12th of May, 1560, in which eighteen thousand Spanish soldiers were slain, their bones were gathered by the Moslems and built up with mortar into this grim trophy of their victory. He also gives brief descriptions of the grand reservoir of ancient Carthage,[2] consisting of seventeen cisterns side by side, with vaulted roofs, and covering a space of four hundred and twenty feet by fifty-four, with a depth of twenty feet, which were filled by an aqueduct fifty miles in length from Mount Zguan. He had previously described the ruins of the ancient subterranean corn magazines of Tripoli, mentioned by classic writers.[3]

Messrs. Fisk and King give an account of the ruins of Luxor, Karnac, and Burnou, in the *Missionary Herald*, 1823, pp. 347–350. There is a description of Jerusalem, by Messrs. Fisk and King, in the *Missionary Herald*, 1824, pp. 40–42. The cedars of Lebanon are described by Mr. Fisk, *Missionary Herald*, 1824, p. 270; and the ruins of Baalbec, pp. 271–272.

Dr. H. G. O. Dwight gives some Armenian traditions about Ararat.[4] On the east is a district called Arnoiodn, *i. e.*, at Noah's foot, for here he stepped out from the ark. Farther east is the town of Marant, *i. e.*, the mother is there, for here his wife is buried. Nakhchevan means "the first resting-place;" that is, the first settlement after the flood. It is called Naxuana by Ptolemy, and, fifty years before him, Josephus wrote that the Armenians gave that name to the place where the ark rested.[5]

The same writer gives a list of Armenian writings previous to the seventeenth century.[6] It contains the names of one hundred and twenty-eight authors, and more than three hundred and ninety-four books. Among the authors are Gregory the Enlightener, Moses Chorensis, Mesrob, the inventor of their alphabet and translator of the New Testament, and Nerses Shunorhali. Seventy-six of the works are translations, mostly of Greek authors, from Plato and Aristotle down to Cyril and Eusebius.

Rev. R. Anderson, D.D., in his *Observations on the Peloponnesus and Greek Islands*, published in 1830,[7] gives a better and more distinct map of that portion of the eastern coast of Malta called St. Paul's Bay than is given in the American edition of Conybeare and Howson's *Life and Epistles of St. Paul*, published in 1854, besides a view of the traditional scene of the shipwreck of the apostle. Dr. Anderson also gives a detailed explanation of the place in connection with that event.

[1] *Missionary Herald*, 1830, p. 276. [2] Do., p. 338. [3] Do., p. 209. [4] Mount Masis.

[5] *Journal American Oriental Society*, Vol. V, pp. 190–191. Compare Smith and Dwight's *Researches in Armenia*, Vol. II, p. 60.

[6] Do., Vol. III, pp. 243–288. [7] pp. 26–27.

The *Researches of Rev. E. Smith and Rev. H. G. O. Dwight in Armenia* furnish a full account of the Armenian and Nestorian churches, and present a vivid picture of their character and condition, besides a description of their ancient cities, monasteries, and churches, such as Echmiadzin, the ecclesiastical, and Vagharshabad, the civil capital, the convent of Khor Virab, and the city of Ardashad,[1] founded by Hannibal, the ruined castle of Mejengerd, with chapels hewn out of detached rocks, and the column of Shamkor, one hundred and eighty feet high.

Rev. Dr. Coleman's *Ancient Christianity Exemplified* is indebted to Dr. Dwight for its account of the Armenian church,[2] and to Dr. Perkins for the chapter on the Nestorian church.[3]

In March and April, 1835, Rev. E. Smith and Dr. Dodge made a tour in the Hauran, of which we have only some brief notices from the pen of Dr. Dodge.[4] Dr. Smith several years later gave an account of the Bedaween in Mount Sinai, the desert of Tih, the country east of the Arabah and in the valley of the Jordan, distinguishing the characteristics of each tribe with his accustomed accuracy;[5] and adds, "But for the misfortune — a shipwreck on the coast of Caramania[6] — that deprived me of the notes of a former journey, I could add a fifth division, the Hauran; but that left me with only a list of some thirty tribes and a few indistinct recollections."

Dr. J. L. Porter[7] says that Mr. Graham is the only traveler since Burckhardt who had traversed eastern Bashan, yet his map shows the route of Messrs. Smith and Dodge in many points identical with his own. True, there is a difference in the spelling of names, and some errors of the press; but the identity of the places is beyond dispute.

Dr. Dodge rode for two hours through a region covered with rocks; traveled part of the time on Roman roads, mentions many ruins, describes a temple at Zoweida, forty feet by fifty, surrounded by a row of Corinthian pillars, and a church two hundred by ninety-five feet, divided into three aisles by similar columns. East of the Kelb el Hauran he found seventy-four deserted villages in a district forty miles by twelve. He dwells repeatedly on the great hospitality of the people. At Salkhat he saw a castle towering conspicuous among other magnificent ruins; at Bozrah, a tank four hundred and ninety-nine feet by three hundred and eight, with walls eight feet thick; also a castle containing an amphitheatre with many of the seats yet entire. In the villages he lodged in spacious, lofty rooms, with ceilings of flat stones reaching from supports in the walls to an arch that ran across the middle of the apartment; and in Edrei he found a splendid Roman ruin altered into a mosque.

Everywhere they were perfectly safe under the energetic rule of Ibrahim Pasha, so that even at Edrei, where Mr. Porter fared so hard, the whole place trembled before them, fearing that they were agents of the government.

In regard to the capacity of the desert of Sinai to support the many thousands of Israel, Dr. E. Smith judged it impossible without a miracle.[8] Only two

[1] Artaxata. [2] pp. 555–563. [3] pp. 564–579. [4] *Missionary Herald*, 1836, pp. 92–97 and 124–127.
[5] Do., 1839, p. 88. [6] *Memoirs of Mrs. S. L. Smith*, p. 324. [7] *Giant Cities of Bashan*, p. 85.
[8] *Missionary Herald*, 1839, p. 82.

showers of rain had fallen for two years previous to his visit. He saw no running stream, and only one plat of arable land, a few rods square. No cattle were kept by the Arabs; only a few camels and donkeys, with some sheep and goats. The few springs were more like nature's ulcers than living fountains, and only in the vicinity of Sinai did he find pure water. Many camels had recently starved to death, and two of those he hired died on the way. In five days' journey he found neither well nor spring; neither grass nor arable land.

Dr. E. Robinson was with him on this journey, preparing for his celebrated *Biblical Researches*. Till the recent investigations of the English Palestine Exploration Society, little has been added to the discoveries of Messrs. Robinson and Smith; and what has been done, if we take the testimony of intelligent scholars on the ground, has confirmed the views advanced in their work.

The temple of Deir el Kulah, near Beirût, is described by Dr. E. Smith,[1] and the Greek inscription to Baal markos (the Lord of sports) found there was sent after his death to Dr. Robinson in New York.

H. A. DeForest, M. D., of Beirût, has contributed much to our knowledge of the antiquities of northern Syria.[2] Dr. W. M. Thomson, author of *The Land and the Book*, has done much for the archæology of Syria. He describes the ruins of Cæsarea,[3] the antiquities of Larnica,[4] Cerenea, Buffa Vento, and Famagousta[5] in Cyprus.[6] He gives an account of the castles of Banias, of Hunin, and the celebrated fortress of Esh Shukeef.[7] If any one would form a vivid conception of the populousness of the very roughest and rockiest portions of ancient Galilee, let him read Dr. Thomson's communication in *Bibliotheca Sacra*, 1855, pp. 822–833. The column Hhamsin, there described, is engraved in the *Land and Book*, Vol. I, p. 476. So is Um el Awamid;[8] but that remarkable castle on the wild cliffs of Wady el Kurn, in four parts, the lowest three hundred feet up the cliff, and the highest at an elevation of six hundred feet, on the top of the narrow triangular point between that and another gorge that comes in from the east, is nowhere pictured, though it must be exceedingly picturesque, clinging to the rocks among the trees. The natural surface had to be made broader by a wall built up from below, so as to afford room for the upper castle, only thirty feet square, the smallest of the four, which were all connected, though each capable of a separate defense.[9] His descriptions of ruins in northern Syria are the most interesting. He introduces us to the noted ruins of Ain el Hyeh (Fountain of the serpent),[10] and gives a full account of Ruad,[11] the Arpad of 2 Kings xviii : 34 — the Aruadda of the Assyrian inscriptions — a rocky island one thousand five hundred paces in circumference, and two miles from shore. Its massive walls, of immense stones, are built sometimes on the edge of the rock, and sometimes in the sea. Some parts of them are still forty feet high. Several hundred cisterns honey-comb the island. Two thousand sailors and ship-builders now occupy the ancient buildings. Several castles are still serviceable, and two harbors, opening to the northeast,

[1] Robinson's *Later Researches*, p. 15.
[2] *Journal American Oriental Society*, Vol. II, pp. 235–247, and Vol. III, pp. 349–366.
[3] *Missionary Herald*, 1835, p. 368. [4] Do., p. 401. [5] Do., pp. 446–448.
[6] Cyprus is *Yatnana* in Assyrian. [7] *Bibliotheca Sacra*, 1846, pp. 193–207.
[8] *Land and Book*, Vol. I, p. 468. [9] Do., Vol. I, p. 457–459. [10] *Missionary Herald*, 1841, p. 97.
[11] Do., p. 98.

are protected by massive walls. Many columns are found with Greek inscriptions.[1]

The castle of Tortosa,[2] with Phœnician foundations and Roman walls, five hundred feet by four hundred, and on the east side not less than sixty feet high, is the most interesting relic of Phœnician fortification in Syria. In this, a building thirty-eight paces long, with walls of immense thickness, was once covered with a vaulted roof supported by pillars of Syenite granite. In this city an ancient church a hundred and thirty feet by ninety-three, and sixty-one feet high, had a groined roof resting on two rows of Corinthian pillars, with a magnificent central arch.[3]

The famous Sabbatical river of Josephus was identified by Dr. Thomson with a large intermitting fountain near the convent of Mar Jirjis and the castle El Husn, north of Lebanon.[4]

The walls and church of Balanea are described.[5] The theater at Gabala,[6] three hundred feet in diameter, is still nearly perfect; and no wonder, for its walls are nearly fifteen feet thick at the top. Ladakeea,[7] built or repaired by Seleucus Nicator, bears many traces of Phœnician work, and tombs and sarcophagi without number. Near this place is an artificial mound about forty feet high, covered with ruins; a deep ditch cut in the rock, one hundred feet wide and a mile and a half in circuit, extends round the sides not bordered by the river. The mountains around abound in ancient castles with Jewish names. Daphne is described by Dr. Thomson,[8] and by Rev. E. R. Beadle,[9] and Antioch by the same pens.[10] Rev. H. B. Morgan copied a Greek inscription of forty-three lines, in Daphne, written probably A. D. 149.[11] The road from this to Aleppo is crowded with ruins — often a dozen in sight at once [12] — aqueducts, tombs, castles and towers, arches of peculiar architecture, and Cyclopean walls of huge stones.

Dr. Thomson gives an account of another tour to Aleppo in 1845–6. He describes the temples at Fukra and Afka, in Lebanon,[13] an inscription in Wady Feidar,[14] ruins at Jebeil [15] and at Tripoli,[16] and the ruined temple of Venus at Arca,[17] on a mound a mile in circumference and two hundred feet high. Just below the temple is an opening in the face of the cliff, whence issued a waterfall supplied by an aqueduct carried, now on arches, and now through tunnels in the rock. The scene must have been one of rare beauty when temple and waterfall were in all their glory.

The castle of Safeeta [18] covers the top of a hill conspicuous from afar. Massive walls, built up in some places for forty feet, form a level surface about four hundred and sixty-four feet in circumference. On this stands a tower one hundred and one feet ten inches long, fifty-nine feet three inches wide, and

[1] For some of the inscriptions, see *Bibliotheca Sacra*, 1848, pp. 252–253.
[2] *Missionary Herald*, 1841, p. 99.
[3] *Bibliotheca Sacra*, 1848, pp. 247–249.
[4] Silliman's *Journal of Science*, November, 1846.
[5] *Missionary Herald*, 1841, p. 101.
[6] Do., p. 102.
[7] *Bibliotheca Sacra*, 1848, p. 260.
[8] *Missionary Herald*, 1841, p. 236; *Bibliotheca Sacra*, 1848, pp. 454–455.
[9] *Missionary Herald*, 1841, p. 207.
[10] Do., 1841, pp. 208,237; *Bibliotheca Sacra*, 1848, pp. 455–458.
[11] See Prof. Hadley's rendering of it, *Journal American Oriental Society*, Vol. VI, pp. 550–555.
[12] *Missionary Herald*, 1841, p. 239.
[13] *Bibliotheca Sacra*, 1848, pp. 3–5.
[14] Do., p. 6.
[15] Do., pp. 7–8.
[16] Do., pp. 10–13.
[17] Do., pp. 15–16.
[18] Do., p. 244.

still eighty-two and a half feet high. The basement seems to have been a magazine; the first story is a church, with groined roof and clustered pillars, and a circular stair in the southern wall leads to a large room above that. East of this artificial summit are some massive foundations and walls built probably by the Arvadites, with the Phœnician bevel, and narrow windows that taper to a point at the top. There is an account of Safeeta, with an engraving, in the *Missionary Herald*, 1868, pp. 73–75.

The castle of Markûb[1] covers a triangular summit of trap-rock about one thousand feet high, joined to the main range by a low ridge fortified by a fosse, and a tower seventy feet high, with walls of basalt sixteen feet thick. The vaults of the castle could hold half of the grain of Syria. Two thousand families might live in it, besides half that number of horses.

The ruins of Seleucia Pieria, built by Seleucus Nicator, extend from the Nebaa el Kebir (Great Fountain) two miles to the sea. Its inner harbor was enclosed by heavy walls with towers and gates. The entrance was cut through a spur of the coast range. Another harbor, one hundred and fifteen paces from this entrance, was built out into the sea in the form of a horseshoe, with overlapping sides. To protect the inner harbor from a mountain torrent, a massive wall was built across its bed to the mountain; then a passage twenty-two feet wide was cut in the mountain, till the sides rose to the height of one hundred feet; then, from this point a tunnel was cut, twenty-one feet square, for a hundred and ninety-six paces, whence it again continued open to the sea. Through this the torrent still flows, and alongside of it is the public highway.

The ruins on Mount St. Simon[2] are towns and temples, castles and cities, built of hewn stones, often ten feet long by two in width, without mortar. Many of the private houses are spacious, with porticoes above and below, supported by columns of a peculiar pattern. The principal ruin is called El Kalah (the castle), though it was a temple, and more recently a church. It is cruciform, two hundred and fifty-three feet and a half long on the inside, by seventy-six feet, with an octagonal area in the center, eighty-nine feet six inches in diameter. Two Corinthian columns adorn each of the eight angles, and from their entablatures spring eight arches thirty-two feet high, which support the dome. Eight shorter columns stand above the first row. Above these, again, were niches for statues, and the interior surface of the dome, eighty feet from the ground, was elaborately ornamented. A pedestal of rock, directly under the center, may have held the famed pillar of Simon Stylites, though some place it on a mountain east of Suadeea. The southeast transept has been transformed into a church. The rock beneath contains vast cisterns, still resorted to by neighboring shepherds. In all this region no arch is found in the most ancient ruins, and the Phœnician bevel does not cross the coast range. The antiquities of Aleppo, Zobah, and Khanasir[3] are also described.

Dr. Thomson found many ruins in Jebel el Aala, at Kurk burj[4] (forty towers), and at Behiyû, where the pillars taper at both ends like a barrel; also at Bshindelayeh, where among temples and tombs was a square monolith,

[1] *Missionary Herald*, 1841, p. 101; *Bibliotheca Sacra*, 1848, pp. 253–254.
[2] *Bibliotheca Sacra*, 1848, pp. 462–466. [3] Do., pp. 466–469 and 475–480. [4] Do., pp. 667–668.

twenty-five feet high, with niches for statues, and a cistern forty by eighty feet, which never fails in the driest seasons. But we cannot go into details, when this mountain contains twenty times as many Greek and Roman antiquities as all Palestine, massive, unique, and in a wonderful state of preservation. Similar ruins abound in Jebel Armenaz, all the way to Edlip and Riha. The whole region lies as much outside the routes of modern travel as of the line of march followed by ancient conquerors.

El Bara,[1] however, deserves special mention. Here, as in Pompeii, many palaces, mansions, temples, tombs, and churches are nearly perfect. For three hours Dr. Thomson could only run from one structure to another, unable to settle down to any. Some buildings had served as a quarry for the castle, whose builders had left immense arches all around, which they did not dare to pull down with the rest of the walls. Dr. DeForest describes one structure which needed only a new roof and floor to be ready for occupancy. It had a veranda in front and an addition behind, with out-buildings, garden, and summer-house. Flat arches crossed the principal room, and on these lay smooth slabs of stone accurately fitted together for a ceiling, while a gable roof had surmounted all.

Dr. Thomson had time to examine only one church, a hundred and fifty feet by a hundred, with outer and inner colonnade of Corinthian columns. The city is without inhabitants, but the scratches (*graphitæ*) of idle boys, with their rude drawings, are yet visible on the walls. Chambers, baths, kitchens, and tombs tell of ancient lives, with their fleeting enjoyments and their end.

At Maarat-Hermel[2] was another picture of the past. Surly shepherds were drawing water for their flocks. Two of them drew up the leathern bucket hand-over-hand from the deep well, to a monotonous song, and, when thirsty, each man pulled away a sheep from the stone trough, and thrust his own head into the vacancy. Yet, not even for money would they give water to Dr. Thomson, or let his horse drink; fit men to drive others from the well (Exodus ii: 17), or even toss them into the nearest pit (Genesis xxxvii: 24), of which several were within reach.

At Kefr Tob[3] — is this the land of Tob (Judges xi)? or the "Ish-tob" of 2 Samuel x: 6? — a life-size monolith of an enthroned goddess, in black basalt, lies mutilated on the ground. Dr. Thomson makes Khan Sheikhoon the Shehoa of Benjamin of Tudela, which his translator, Mr. Asher, says is a mistake for Riha, a place two days from Hamah, instead of half a day, as this is, and as Rabbi Benjamin says that it is.

He describes Hamah[4] and Salemiyeh[5] on the authority of Dr. DeForest, Hums,[6] and Zephron,[7] one of the landmarks of Canaan (Numbers xxxiv), but we pass them all to reach Apamea,[8] a city grander but more ruined than El Bara. The northwest corner of the wall is well preserved, and the north gate is almost perfect. A grand avenue extends from this for more than a mile to the south gate. It is lined on both sides with a Corinthian colonnade about thirty feet high, composed of about eighteen hundred columns only six and a half feet

[1] *Bibliotheca Sacra*, 1848, pp. 674–677. [2] Do., p. 678. [3] Do., p. 679.
[4] Do., 1848, p. 680. [5] Do., p. 682. [6] Do., p. 683 [7] Do., p. 684. [8] Do., p. 685.

apart. The sidewalks were twenty-four feet wide, and the roadway sixty-nine; and the columns, being three feet in diameter, made the avenue a hundred and twenty-two feet wide in all. The shafts for a certain portion of the way were plain, then for a like distance fluted, then double fluted, or both convex and concave, then spiral, and again with a square rib between the flutings, but all in regular order. Here and there large squares on the avenue were lined with a peristyle of larger pillars, and the cross streets had smaller ones. Occasional groups of columns among the ruins point out the sites of temples, palaces, agorae, and the other public buildings. One wanders from square to square, till, sated and weary, he ceases to note details. In 1812 Kulaat el Madyook, the only inhabited part of the city, was occupied by a rebel chief, so that Burckhardt could not enter it, and thus failed to see the most remarkable ruins in northern Syria. The city was built by Seleucus Nicator, and named in honor of his wife, Apamea.

Riblah, the scene of Zedekiah's sufferings, and where Jehoahaz was imprisoned, is described,[1] and the kamoa of Hermel, a solid structure thirty feet square and eighty feet high, with a pyramidal apex, adorned on the lower portion with hunting scenes in *alto rilievo*.[2]

Dr. B. Schneider[3] describes some tombs in Oorfa, excavated in the hill-side, where the visitor enters first an apartment from twelve to fifteen feet square and about eight feet in height, with loculi on three sides, each side having one large enough for an adult. Sometimes other rooms opened out of this, each with its three loculi. One of them had been recently opened, and the remains of bones were still to be seen; also fragments of glass lachrymatories. In Cyprus he had seen them of alabaster.

He was interested especially in a groove just outside the threshold and extending to the left, large enough to receive a round, flat stone, of the size and thickness of a millstone, which evidently closed the entrance when rolled directly in front, and opened the tomb when it was rolled in the groove to the left. In one case this stone hindered his going in, because it was not rolled away, and it was too heavy for him to move alone.

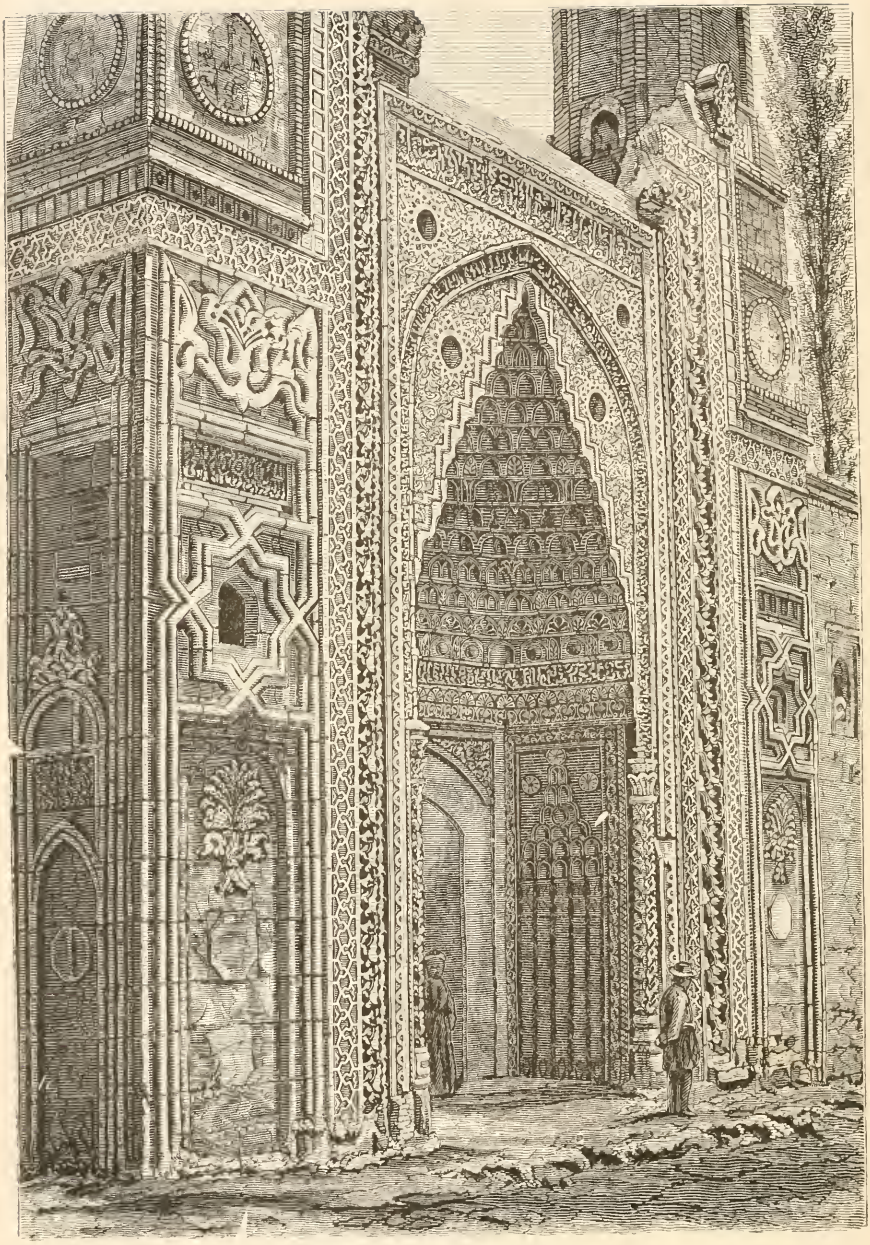
He uses these to illustrate the mode of closing the sepulcher of our Lord, and does not wonder that the women felt unequal to rolling away the stone from its door. (See Matthew xxvii: 60, and Mark xvi: 3–4.) He says the stone must be rolled away, not raised or lifted. He refers also to the appropriateness of the expression "entered," *i. e.*, on a level, and not going down, as though excavated beneath one's feet instead of in the hill-side; also of the "young man sitting at the right side" (Mark xiii: 5), just as one might have done in these tombs. He also points out the appropriateness of the word "rolled back" (Matthew xxviii: 2), which could not be true save of precisely such a stone, and situated in the groove as these are. The only difficulty is in the angel sitting upon it, but this he says might be simply leaning against.[4] He also describes the supposed site of the famous school of Edessa, with some of

[1] *Bibliotheca Sacra*, 1848, p. 693.

[2] Do., p. 695; *The Land and the Book*, by W. M. Thomson, D D., Vol. I, p. 362; *Bible Lands*, by H. J. Van Lennep, D.D., p. 255. In both of these is an engraving of it.

[3] *Bibliotheca Sacra*, 1862, p. 849.

[4] See, also, *Bibliotheca Sacra*, 1879, pp. 553–555.



GATEWAY AT SIVAS.

the ancient wall still standing, and remains of marble pillars scattered about, but above all a tower, which seems to have been built for a belfry, though now used as a Moslem minaret.

The engraving opposite is the gate-way of a college built in Sivas, the ancient Sebaste, for the study of the Koran. There are three or four such ruins in the city, witnessing both to the wealth and architectural skill of their builders. They are much injured by time and by the spoliation of the Turks, who make them quarries for the materials of their meaner structures. The stone is a white marble, grown dingy by long exposure. The coarser parts of the structure are built of the red sandstone that underlies the gypsum of this region. The style is Saracenic, in distinction from the Moorish architecture of Spain. The ornamentation may be deemed excessive, but not more so than some specimens of Gothic. The tracery is so delicate, and the patterns so exquisite, that one cannot help enjoying them. So far Rev. Edward Riggs describes it, but the writer cannot forget how he stood a long time in the desolate court, enjoying the sight of this relic of the past, in the year 1842. The upper center of the front has fallen. The line of Arabic inscription below the fracture is still legible, and gives a good idea of that style of writing. Another similar line is seen running round the bottom of the conical recess above the door. Still another is seen over the opening in the tower to the right of the man standing in the door.[1]

Rev. S. Wolcott, D.D., diligently improved every opportunity to carry out the work begun by Dr. Robinson, who calls him "an active and intelligent observer of men and things,"[2] and says that "the results of his investigations were of sufficient importance to be laid before the public."[3] Ritter also quotes him with commendation.[4] He discovered a vaulted passage under the Mosk El Aksa, in Jerusalem, and introduced Mr. Tipping, an English artist, there.[5] He also first explored, at no little risk, the dragon well (Hamam Esh Shefa'), near the Haram connected with the subterranean water-courses of the ancient city.[6] He discovered and explored the portion of the aqueduct from Solomon's pools within the city.[7] He first identified the valley of Berachah (Wady Bereikut);[8] also Beth zur (Beit sûr);[9] also Beth anoth (Beit Ainûn).[10] He first visited Sebbeh, and verified Dr. Robinson's conjecture that it was the ancient Masada.[11] He also identified Caparcotia with Kefrkud,[12] and visited and confirmed Dr. Robinson's identification of Lejjun with Megiddo.[13] He disproved James Ferguson's identification of Mt. Zion with Mt. Moriah,[14] opposed Mr. Grove's location of the cities of the plain north of the Dead Sea,[15] and replied to Dean Stanley's attempt to identify Moriah with Gerizim.[16]

Some writers had made the river Sajour empty into the Euphrates, and others into the Coik. Rev. A. T. Pratt, by personal examination, found that its natural channel flowed into the former, but an artificial channel carried a

[1] *Missionary Herald*, 1873, p. 104, and H. J. Van Lennep's *Bible Lands*, p. 788.
[2] *Bibliotheca Sacra*, 1843, p. 17. [3] Do., p. 10.
[4] *Geography of Palestine*, Vol. II, p. 163, and Vol. IV, p. 331. [5] *Bibliotheca Sacra*, 1843, pp. 17–22.
[6] Do., 1843, pp. 24–28, and Hackett's Smith's *Bible Dictionary*, *sub voce*.
[7] *Bibliotheca Sacra*, 1843, p. 31. [8] Do., p. 43. [9] Do., p. 56. [10] Do., p. 57.
[11] Do., p. 62. [12] Do., p. 76. [13] Do., p. 77. [14] Do., 1866, p. 684; 1867, p. 116.
[15] Do., 1868, p. 112. [16] Do., p. 765.

part of its waters to the Coik, passing through rocky tunnels and crossing other streams on aqueducts, thus confirming the idea of Carl Ritter.[1]

There are many brief notices of antiquities in the *Missionary Herald.* Rev. Drs. H. G. O. Dwight and W. G. Schauffler describe the antiquities of Saloniki.[2] They correct Butler's classical *Atlas* in its location of Mount Olympus, Mount Ossa, the rivers Echedorus and Axius, and the lake of Pella,[3] and describe the ruins at Philippi.[4]

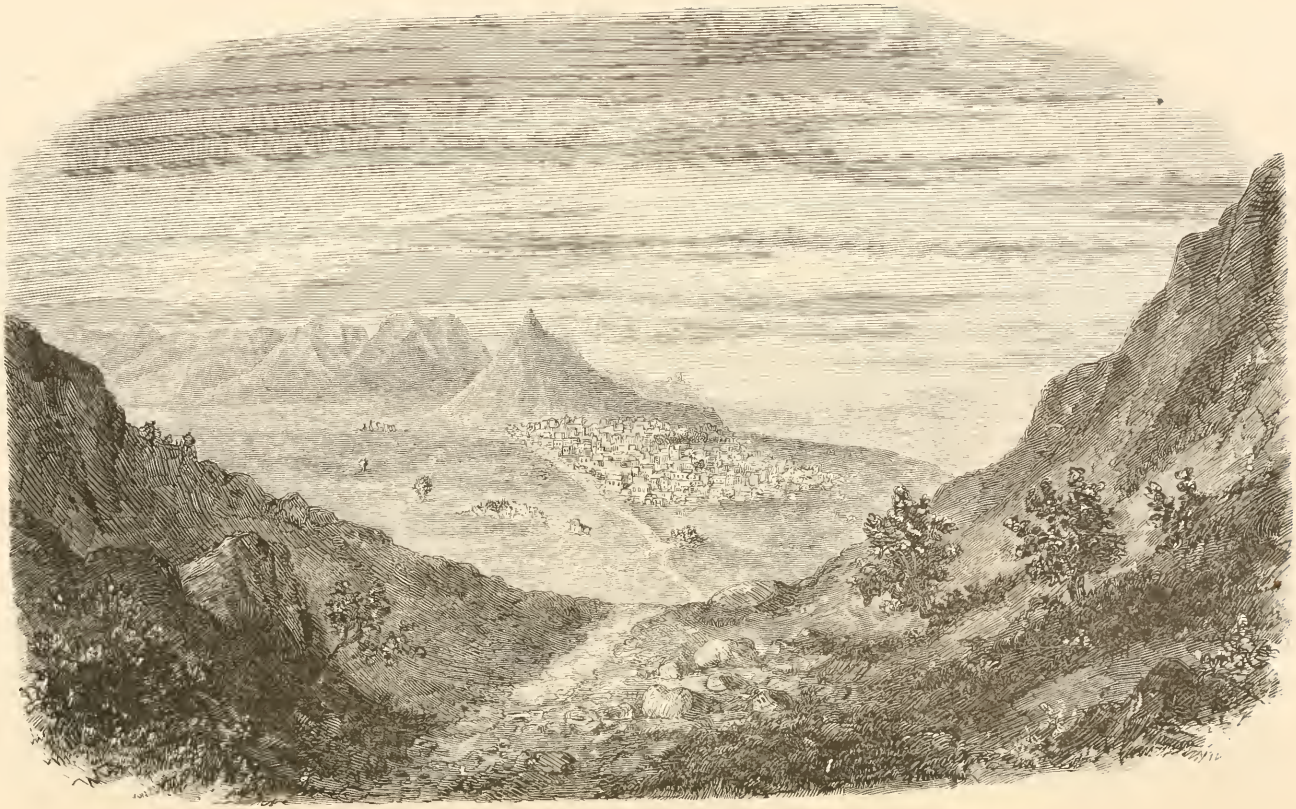
Rev. G. W. Leyburn describes the scenery of Laconia, Sparta, and the tombs of Scandia.[5] J. King, D.D., narrates his ascent of Parnassus and visit to Delphi.[6] Rev. J. B. Adger, D.D., furnishes glimpses of Magnesia and Hermas, Sardis and Philadelphia, Thyatira, Pergamos, and Nice.[7] Rev. J. O. Barrows describes some curious stone structures in Cesarea. They are from twenty to thirty feet high, and octagonal, though two or three are round, but all with conical roofs. Some have only one door, on the east or northeast; others have another opposite to that one, and there are a few with four doors. They were probably Turkish tombs. In all is a stone floor, several feet above the ground and on a level with the door-sill. The bodies probably lie below this. One of them is seen in the view of Cesarea, p. 77.[8]

Rev. O. P. Allen, of Harpoot, describes the ruins at Farkin (Mia Farekin ?).[9] It was once a large city. The wall is broken down in only a few places. At the southeast corner is a stately pile of ruins, said to have been built by St. Marutha over the martyrs slain by Shapoor, king of Persia. Its outside walls, with some of the pillars and arches, are still standing. A few polished columns of porphyry had fallen. Their capitals, resembling a basket of wicker-work, were carved from a softer stone. The ground around is paved with gravestones. There are many inscriptions, but none very ancient. An extensive ruin at the northeast corner of the city seems to have been a palace. Much of the space inside is now cultivated. At the west is a beautiful mosque, built in 624 A. H. (1213 A. D.), by Modhuffer ed Dunghazi, nephew of Salah ed Din (Saladin). The ruins of a church are much older. Its walls, three feet thick, were built of large hewn stones. Three of its walls are standing, and the gables show that it had a slanting roof. There was a semicircular apse at the eastern end, which seemed to have been frescoed; above this was a beautifully carved cornice. The interior width was seventy-five feet; the length one hundred and eight; and the height to the eaves thirty feet. There is a watch-tower outside the walls of the city, one hundred feet high, overlooking a valley. The present ruins are more recent than the Christian era, but some mounds and scattered stones point to an earlier date. Some suppose it to be the ancient Carcathiocerta.

Charran, Harran, or Haran, is situated not far from Oorfa, to the southeast, on an irregular platform nearly half a mile square, with an average height of twenty-five feet above the plain. This is enclosed by a wall of hewn stone, about forty feet in height; the stones in the upper courses weigh from a quarter to half a ton each. Outside this was a wide moat. It is strange

[1] *Erdkunde Theil*, Vol. X, p. 1034. [2] *Missionary Herald*, 1836, p. 246. [3] Do., p. 286.
[4] Do., p. 333. [5] Do., 1839, p. 179. [6] Do., 1840, p. 360.
[7] Do., 1839, pp. 206, 226; 1844, p. 55; 1858, p. 108. [8] Do., 1871, p. 258. [9] Do., 1869, p. 30.

RUINS AT HARAN.



LYSTRA, TURKEY.

that a wall like this should have been built twenty-five miles from the nearest quarry. More thorough search may, however, reveal one much nearer. If not, its location at the junction of two great highways, from Assyria and Babylonia to Palestine and Asia Minor, making it a strategic point of great importance, may account for so great an outlay. It is mentioned in the inscriptions of Tiglath Pileser I, B. C. 1100.

Conspicuous among the ruins is a tower seventeen and a half feet square at the base and one hundred and two high, visible fifty miles distant. The stairs inside have fallen. Perhaps it was connected with the Temple of the Moon, or with the worship of that luminary, for this was a noted center of Sabianism. The pointed roofs are comparatively modern, though the foundations of the walls may be older. The broken column in the engraving is fourteen feet five inches in circumference. It is of white marble streaked with red. Broken monolithic columns lie around, and a beautiful octagonal stone fountain is still perfect. A castle at the southeast corner has a number of small rooms in an inner core, like the cells of our state prisons. The ancient name was Carrhæ. Here Caracalla was assassinated, 217 A. D., and here Crassus suffered his famous defeat by the Parthians, B. C. 51. Now it is empty and desolate.[1]

The Bible student will be interested in the accompanying view of ancient Derbe, which is thus described by Rev. L. H. Adams.[2] Derbe, now called Divle, lies in a deep, winding ravine, at the western base of the Karamanian Taurus. The ravine is nearly level, from a quarter to half a mile in width, is finely watered, and abounds in trees. Its sides are limestone cliffs from one to two hundred feet in height, and full of caves and winding passages. The population is Moslem, and numbers about four thousand five hundred. Though there are few ruins, yet scholars recognize it as Derbe, because it is the only place that could sustain a large population between Karaman and Eregli. It lies very near the ancient road from Tarsus to Lystra. It is nearly in sight of this last place, and only eleven hours from it, by an easy road, and Paul would more naturally flee towards his friends in Tarsus than to his enemies elsewhere ; then, the many caves, where a fugitive could easily defy pursuit, suggest that the apostle was as shrewd in retreat as he was bold in advancing on the kingdom of Satan.

We are able, also, to furnish a view of Lystra, the other city of Lycaonia mentioned in the fourteenth chapter of the Acts, from the pages of the *Herald*,[3] and a description based on a communication from the same missionary pen. Kara dagh[4] stands alone on a great plain between Koniyeh and Karaman. It is fifteen miles long, six miles in width, and three thousand five hundred feet high, lying north and south. On the western side, in a large valley opening out to the northwest, on the plain of Koniyeh, stands the modern town of Maaden Shehr,[5] called in the vicinity, also, Bin bir kineeseh.[6] This is the modern representative of ancient Lystra. Its ruins cover a space a mile in length and three quarters of a mile in breadth. They date back only to the eighth century, when an Armenian king established a theological school in the

[1] Rev. L. H. Adams, in *Missionary Herald*, 1874, pp. 377–379. [2] *Missionary Herald*, 1871, p. 225.
[3] 1871, p. 193. [4] Black mountain. [5] Mine city. [6] Thousand and one churches.

place. Besides countless ordinary buildings, twenty large structures may be distinguished, some of them little injured. They are circular, oblong, octagonal, and square, with wings, porticoes, arches, and some with bay windows. The friezes, cornices, and mouldings show great beauty of design. The material is a hard, brown stone, cut and polished exquisitely. Many of the walls are perfect. A beautiful tomb, twenty by fifteen feet, and twelve feet in height, attracts attention. Its polished walls are uninjured. Some distance out on the plain are the ruins of a large structure on an eminence. Was this the temple of Jupiter "that was before their city?"[1] The structures now standing were erected from the ruins of a more ancient city of great splendor. The view across the plain to Iconium is very picturesque, and Timothy had only to climb the cliffs above his home to enjoy a magnificent view of Lycaonia and part of Cappadocia.

Some make Latik, a poor village near Antioch, represent ancient Lystra; but would the apostle, fleeing from his persecutors in Iconium, go back into the jaws of his enemies at Antioch, from whom he had just escaped? Would he not rather go on twelve hours across the plain in the direction of his home? Besides, Latik is built of mud, with little to intimate antiquity. Lystra seemed empty and desolate; but a few bandit-looking fellows emerging from holes under ground, and pertinaciously dogging his steps, induced the missionary to leave the place almost as expeditiously as the apostle.

Mr. Adams gives an account of the ruins of the ancient Soli — whence our word solecism, because they used barbarous Greek. They are on the shore, five miles west of Mersin. The city, founded by the Achæans and a colony from Rhodes, was the port of entry for Iconium, and was greatly enlarged when Pompey, B. C. 69, conquered the pirates of Pisidia and Cilicia, and compelled them to settle here, changing its name to Pompeiopolis. Forty out of two hundred columns are still standing, most of which appear in the engraving, and in 1859 a splendid Roman theater stood here, nearly perfect. It was built of white marble, with wreaths and tragic masks in *alto rilievo* on the cornice, and in the center of the structure were the broken fragments of a statue of Venus; but the Turks then ruined it, making it a quarry to supply stones for a mosque in Mersin.[2]

Mr. Adams also describes some Roman ruins half an hour southwest of Kharnu in the Giaour Dagh. The space enclosed by strong walls of black basalt was on the west side one thousand six hundred and fifty feet, on the east one thousand five hundred, and north and south each one thousand one hundred and sixty-seven. The walls were twenty feet high and six feet thick. Those of the inner citadel, one hundred and sixty-eight feet square, were much more massive. The upper story of the castle had fallen, and the lower one rested on strong brick arches. Underneath were vaults, that seemed to have been finished yesterday.

North of Kharnu, the Dul Dul Dagh rises eight thousand five hundred feet. In a deep gorge here the Romans commenced, high up on the face of the cliff, to cut a deep channel in the solid rock, building up massive piers where neces-

[1] Acts v: 13.

[2] *Missionary Herald*, 1871, p. 129.

RUINS OF POMPEIOPOLIS.

sary, till they brought out a large stream of water at a great elevation above the plain. The aqueduct is still in use; and in like manner Aintab lives by an old Roman aqueduct twenty miles in length, that seems good for a thousand years to come.[1]

In addition to these antiquities described by Mr. Adams, we cannot refrain from alluding to a more ancient profile which he describes.[2] He was journeying north from the monastery of Sis, up among the mountains. After crossing the eastern branch of the Seihoun, he turned sharply to the west and climbed the opposite declivity. Here, two miles or more to the west, the sun seemed to shine through a hole in the mountain. More wonderful yet, the profile of a Grecian face appeared, as perfect as a painter could draw it, with only a slight defect in the lower part of the chin. It must have been from two hundred and fifty to three hundred feet in length, and just before it, on a pedestal of rock, stands a smaller image, leaning its head against the end of the huge nose above it. It was through the hole thus formed that the sun was shining.

Rev. Henry J. Van Lennep, D.D., has given some interesting accounts of antiquities in his *Travels in Asia Minor*.[3] He describes the ancient wells,[4] or cisterns, at Amasia and Tocat, running down into the rock, at an angle of 45 degrees, to a depth of about seventy feet, with steps down to the bottom; also[5] the tombs of the kings of Pontus at Amasia, and an aqueduct cut in the rock above that city, about five feet in width and the same in depth, for a distance of three miles. He gives us a view of the traditional cell of St. Chrysostom,[6] among the ruins of Comnena Pontica, near Tocat;[7] and a description of the foundations of the treasure house of Mithridates, on the summit of Yooldooz Dagh,[8] half way between Tocat and Sivas. Two miles east of Boghas Keuy,[9] not far from Yozghat, is Yazile Kaya,[10] where the faces of large rocks, enclosing an irregular space, have been smoothed with the chisel and covered with sculptures in bas-relief that seem to commemorate the introduction of the Assyrian gods into Pontus. The whole is carefully delineated by the facile pencil of Dr. Van Lennep, and forms a valuable accession to our antiquarian treasures.[11] A few hours to the north of this, near Karahissar, are the remarkable structures of Euyuk, composed of a black, hard granite. Here a passage eleven feet four inches broad and thirty feet eight inches in length is terminated in front by two huge blocks fifteen feet high and seven feet square, one on each side of the passage, with a large sphinx carved on their front faces, as bulls or lions stand on each side of the entrances of the palaces at Nineveh. A block that has fallen in front of this has six men, one behind the other, in the same marching attitude and wearing the same dress. On the outer walls that extend at right angles on both sides are sculptures representing the image of a bull on a pedestal, with an altar in front, and priests with offerings of a goat and oxen; a woman and other figures, one climbing a ladder, another blowing a wind instrument, and another striking a lyre, etc. These are on one side, and

[1] *Missionary Herald*, 1867, p. 244.
[2] Do., 1870, p. 405.
[3] Two vols., 12mo, pp. 343, 330. New York: 1870.
[4] Vol. I, p. 88.
[5] p. 90.
[6] p. 323.
[7] Vol. II, p. 70–75.
[8] Star mountain.
[9] Village of the Pass.
[10] The inscribed rock.
[11] *Travels in Asia Minor*, pp. 112–128.

a figure seated on a throne, with three priests facing it, occupies the other. In front of these last is a large block, representing a lion seizing a sheep in his fore paws, the rest of his body still retaining the attitude of the leap that reached his victim. Dr. Van Lennep considers the structure and bas-reliefs the work of Egyptian artists.[1] An inferior lion and other sculptures are found at Yozghat. The Euyuk antiquities are illustrated in detail, as well as the lion at Yozghat. Another lion at Angora, and a temple of Augustus there, are described,[2] with a solitary marble column. The remains of the theater at Pessinus, now Balahissar, with an antique carving from the temple of Bacchus there, are also delineated,[3] besides an elaborately ornamented door at Bagh luja.[4] Perhaps the most interesting antiquity described in these volumes is the statue of Niobe, carved out of the living rock, on the eastern side of Mt. Sipylus, four hundred feet above the plain, near Smyrna. Homer sang of this (*Iliad*, xxiv, 614): "And now among the rocks and solitary cliffs of Sipylus, where they say are the couches of the divine nymphs, who dance upon the banks of Acheloüs, Niobe, though turned to stone, still broods over the pain inflicted by the gods." Pausanias said of it: "Close by, the rock does not show to the spectator the form of a woman, but if you stand off a little, you think you see a woman weeping." Dr. Van Lennep found the rock cut smooth to the top, fifty feet overhead; an outer niche thirty-five feet high and over sixteen feet wide contains an inner and deeper one, in which the bust, eight feet high, rests on a pedestal twelve feet in height; the shoulders are nine feet wide, and the head four feet two inches high. It is so arranged that the dripping of the rain from the rock above pours down the face, which is discolored as if by channels of tears. One dark blue vein pours from the right eye over the lower part of the face, drops on the breast, and thence, falling on the pedestal, flows in two broad streams to the foot. Ovid says: "There, fastened to the cliff of the mountain, she weeps, and the marble sheds tears yet even now." (*Met.* ii, p. 310.) For fuller details the reader must go to the pages of Dr. Van Lennep.[5]

He also describes an image of Sesostris on Mount Tmolus, the southern wall of the plain of Smyrna, not far from an ancient palace of the Byzantine emperors. The face of the limestone is smoothed forty-five feet high and sixty feet broad, and is best described in the words of Herodotus: "It represents a man four cubits and a spithame in height,[6] holding a spear in his right hand and a bow in the left, with the rest of his costume also half Egyptian and half Ethiopian. Across his breast, from one shoulder to the other, is an inscription in Hieratic characters: 'I by my shoulders gained possession of this country.'" (*Herodotus*, Book II, Section 106.)[7]

Rev. J. W. Parsons describes the excavations of Mr. Wood at Ephesus, bringing to light the quay, the wool market, the Odeon, and other buildings of great magnificence, the theater mentioned in Acts xxix: 31, and an inscription that put him on the track of the Temple of Diana, which he has since discovered.[8]

[1] *Travels in Asia Minor*, Vol. II, pp. 128-148. [2] pp. 190–191. [3] pp. 212–213. [4] p. 220.
[5] pp. 300–317. [6] Six and a half feet. [7] *Travels in Asia Minor*, Vol II, 317–325.
[8] *Missionary Herald*, 1869, p. 179.

Rev. N. Benjamin describes Thermopylæ,[1] and Rev. E. M. Dodd, Berea and Larissa.[2] Mr. Dodd also gives an account of some ancient buildings in Thessalonica, now used as mosques, but originally Pagan temples, and after that churches. One of them is sketched in the *Missionary Herald* for July, 1836. In the yard of one is an ancient *bema*, or pulpit, cut from a single block of marble, and in another is one cut from a solid block of verd-antique. He describes, also, a Roman aqueduct from Mount Khortiateh, still in use, and many fragments of ancient architecture in the city.[3]

Rev. H. N. Barnum, of Harpoot, describes some Assyrian antiquities near the source of the eastern Tigris.[4] The river flows out of a cavern directly under the mountain, in a stream ten or twelve feet wide and a foot deep; but a third of a mile above, the same stream, apparently, enters the mountain in a cavern about one hundred feet high and sixty feet wide, grander than the arch of a cathedral. Mr. Barnum followed it in some two hundred feet, as it dashes among rocks fallen from above. On the face of the rock, fifteen feet above the exit of the stream, is a cuneiform inscription, which Col. Rawlinson once read: "This is the third time that I, Belshazzar, king of Assyria, have conquered this region." This must be one of the earlier *tentative* readings, for we have no record of any Assyrian king by that name; but Tiglath Pileser,[5] on his third invasion of Nahiri, the Assyrian name of this region, "set up a tablet by the sources of the Tigris, recording his conquests, which remains there to this day."[6] Shalmaneser II[7] also went to the sources of the Tigris, and carved a tablet in the rock near the town of Egil, in which he gives an account of his triumph over Benhadad,[8] B. C. 845. He went again to Nahiri, and in a cave from which the Tigris issues, carved another memorial of his conquests.[9] Tugulti Ninip II,[10] 891–885 B. C., "set up a commemorative tablet at the sources of the Tigris."

Near the river Mr. Barnum traced the wall of an ancient fort, with the foundations of towers here and there in it, enclosing about eight acres. The wall was carried to the top of the mountain, where a cistern was cut in the rock, and near it stairs, also cut in the face of the rock for several hundred feet, ending in a door-way to two rock-hewn passages leading down to the cavern through which the river flows. The road to Erzrûm, which must have been the highway from Nineveh to Armenia, passes a few rods distant. This must have been an Armenian stronghold, and, in capturing it, the king of Assyria captured the region. By the side of the inscription is an Assyrian figure with a staff (or mace) in his right hand, and his left hand pointing to the tablet. There were two other large caves, one of them fortified at the entrance and extending far into the mountain. A mile and a half in, a cistern was filled with water from the roof, and another beyond that.

Dr. J. Perkins gives an account of Elkosh and the convent of Rabban Hormuz;[11] also of an ancient tomb in Geogtapa, where a skeleton was found

[1] Do., 1841, p. 411. [2] Do., 1852, p. 236. [3] *Bibliotheca Sacra*, 1854, pp. 831–832.
[4] *Missionary Herald*, 1870, pp. 128–129. [5] 1120–1100 B. C.
[6] *Ancient History of Assyria*. By George Smith. New York, 1876, p. 32. [7] 860–825 B. C.
[8] *Ancient History of Assyria*, pp. 51–52. [9] Do., p. 53.
[10] Do., p. 35. [11] *Missionary Herald*, 1850, p. 84; *Bibliotheca Sacra*, 1852, p. 642.

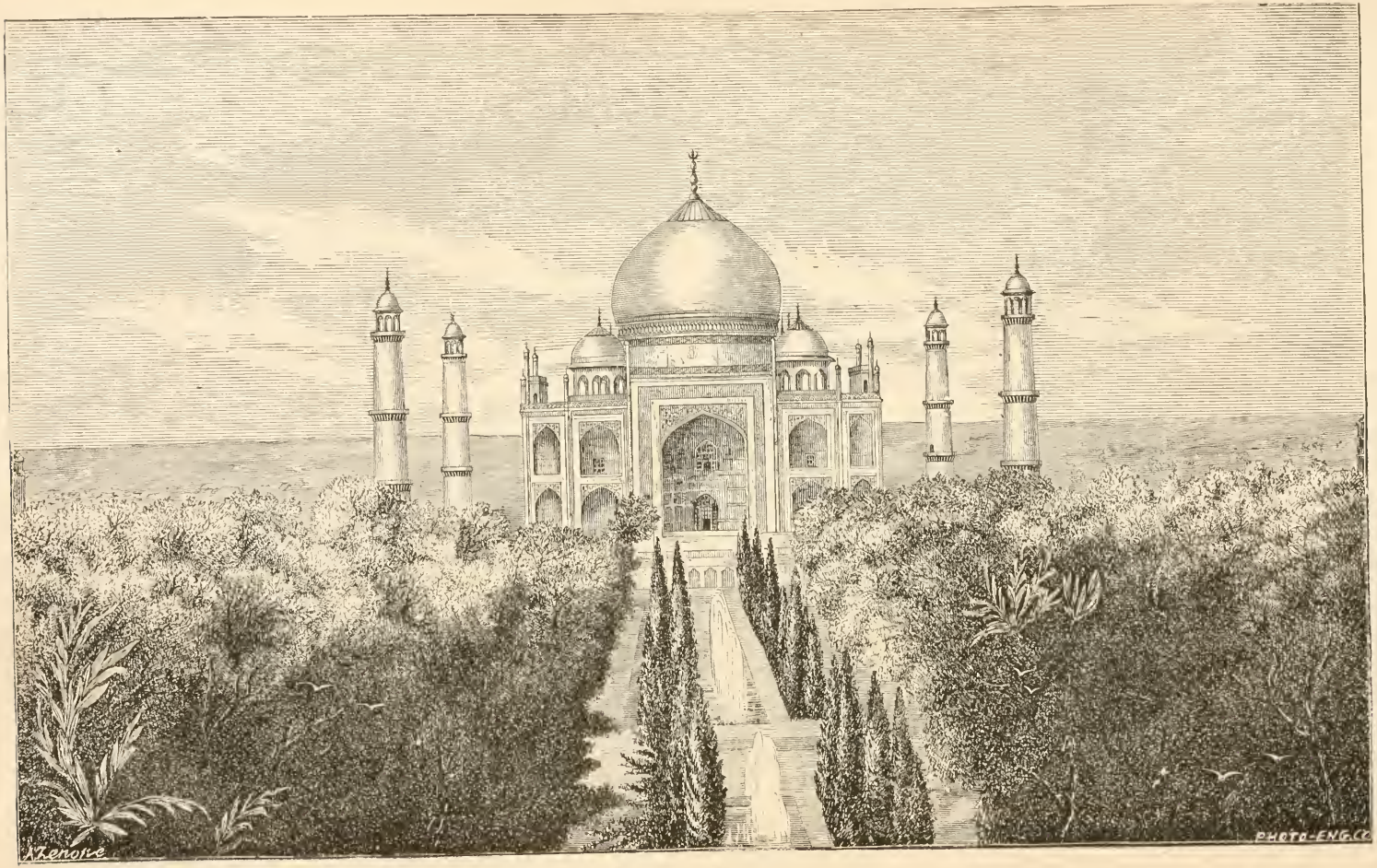
with copper spikes driven into its skull; and of another skeleton in an earthen sarcophagus, with a pot of silver coins, found about twelve miles from there.[1] He also describes an ancient sculpture on an isolated cliff in the plain of Salmas.[2] Rev. D. W. Marsh gives a vivid picture of an ancient convent in Jebel Tûr.[3] Rev. T. C. Trowbridge corrects some mistakes about the rock at Van.[4] A. Grant, M. D., describes an ancient church in Jeloo,[5] gives an interesting account of the ancient usages of the Nestorians,[6] and furnishes valuable information about the Yezidees.[7] Further information about that strange people is given by the writer[8] and by Rev. H. Lobdell, M.D.[9] The Ansairiyeh in northern Syria are described by Dr. Thomson[10] and Rev. E. R. Beadle.[11] Dr. C. Hamlin, of Constantinople, has translated an essay by Dr. Paspati, of Greece, on the language of the gypsies in Turkey.[12]

In *India* Dr. D. O. Allen mentions inscriptions in the rock temples of Joonnur;[13] he also describes some of the magnificent structures of Shah Jehan, at Delhi.[14] The Jumma Musjid, or royal mosque, cost half a million of dollars. This may seem incredible; but a court-yard four hundred and fifty feet square, paved with granite inlaid with marble, and the mosque itself, two hundred and sixty-one feet in length, with three domes of white marble, and two graceful minarets, the whole interior, floor, walls, and ceiling covered with white marble, may explain how so vast a sum could be expended.

The gardens of Shalemar, with baths, fountains, and statues, a mile in circumference, cost more than four millions. When the Mahrattas stripped off the silver ceiling of the audience hall of the palace, the money coined from it amounted to $800,000. The splendor of this palace may be inferred from one part of the royal throne, which resembled the expanded tail of a peacock, its brilliant colors imitated by sapphires, emeralds, rubies, and other precious stones, giving variety to a mass of diamonds and other brilliant gems. Tavernier, who saw it, and was himself a jeweler, estimated the value of this alone at thirty millions of dollars.

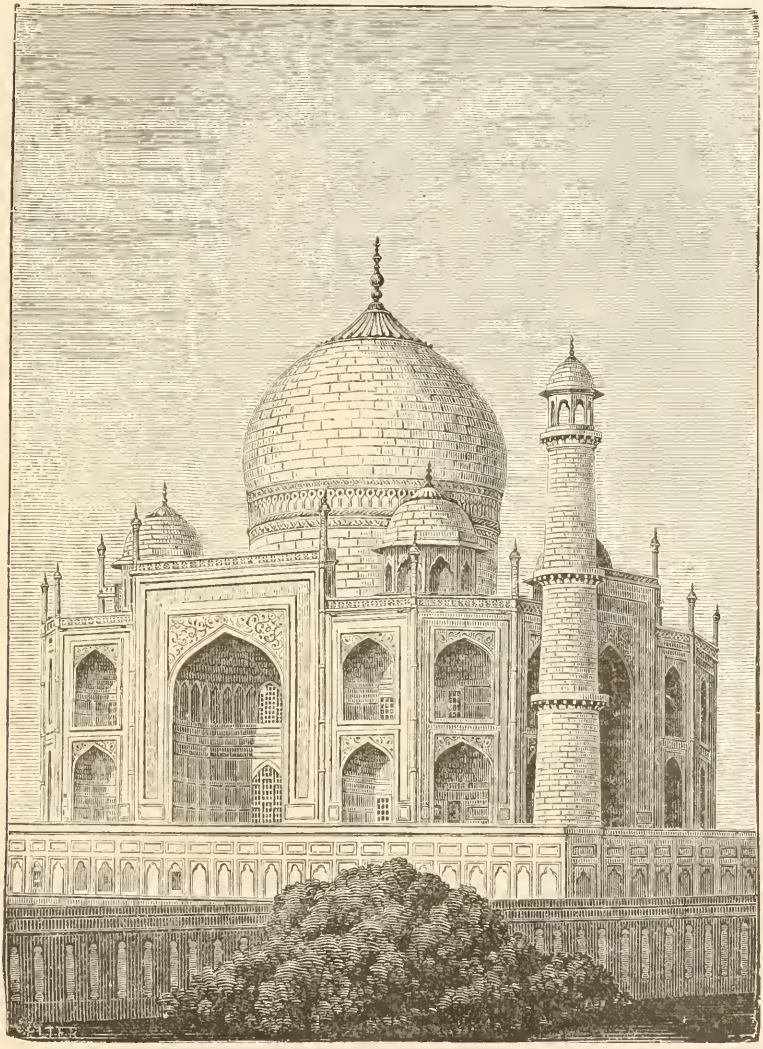
The Taj Mahal,[15] the mausoleum of the favorite wife of Shah Jehan, who died 1631 A. D., exceeded in splendor all his other buildings. It occupies the center of a spacious park on the banks of the Jumna, which was most elaborately adorned and kept in perfect order. The entrance is by a gate-way of red sandstone, inlaid with mosaic and inscriptions from the Koran in white marble. The central avenue, seen in the engraving, contains eighty-four fountains, with a marble reservoir in the center, forty feet square, containing five large jets of water, and bordered by rows of cypress trees. Birds sing in the shrubbery, while roses and orange blossoms perfume the air. In the center of this beauty and fragrance, the Taj, built of white marble, stands on a terrace of marble thirty feet in height, with a minaret at each corner. The dome, shining like

[1] *Missionary Herald*, 1838, p. 458.
[2] *Bibliotheca Sacra*, 1852, p. 229.
[3] *Missionary Herald*, 1852, p. 109.
[4] Do., 1859, p. 48.
[5] Do., 1842, p. 217.
[6] *The Nestorians, or the Lost Tribes.* London and New York: 1841.
[7] *Missionary Herald*, 1841, p. 117; 1842, pp. 310–318.
[8] *Bibliotheca Sacra*, 1848, pp. 154–171.
[9] *Missionary Herald*, 1853, p. 109; *Memoir*, by Prof. Tyler, pp. 213–226.
[10] *Missionary Herald*, 1841, p. 104.
[11] Do., 1841, p. 206.
[12] *Journal American Oriental Society*, Vol. VII, pp. 143–270.
[13] *Missionary Herald*, 1836, p. 63.
[14] *India, Ancient and Modern*, p. 124.
[15] Crown of the world.



THE TAJ MAHAL.

burnished silver, is seventy feet in diameter, and the structure is two hundred and seventy-five feet from the terrace to the golden crescent at the top of the spire. The whole of the Koran is said to be inlaid on the building, in black marble outside and in precious stones within. Three thousand eight hundred



TAJ MAHAL.

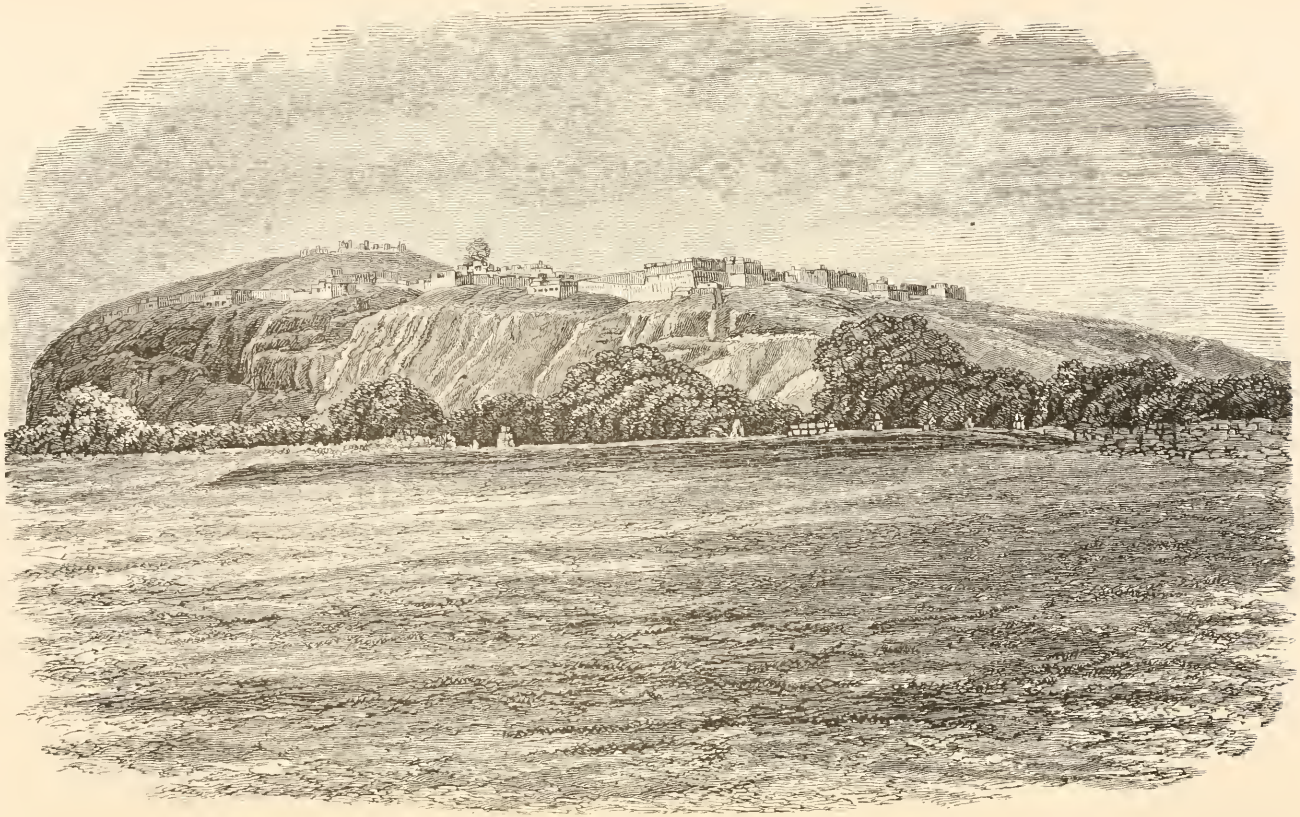
and seventy pounds of opals, four thousand six hundred and forty-four of rubies, eight thousand three hundred and forty-two of emeralds, twelve thousand four hundred and seventy of sapphires, seventy-seven thousand four hundred of carnelian, twenty thousand six hundred and forty of turquoise, thirty-seven thousand eight hundred and forty of lapis lazuli, and forty-three thousand of

agate and onyx were used in its inscription, besides immense quantities of less valuable material. In the center, under the dome, is the tomb, enclosed by an open screen of white marble inlaid with mosaic. The walls of the cenotaph itself are of snow-white marble, inlaid with flowers that look like embroidery on white satin. Thirty-five different kinds of carnelian are used in one leaf of a carnation, and in one blossom not larger than a dollar, twenty-three different gems may be counted. A single flower is said to contain three hundred different stones. The name and virtues of the queen are recorded in the same costly manner. Tavernier tells us that the building of this edifice occupied twenty thousand men for twenty-two years. It was finished not far from 1650, and cost nearly $16,000,000 in gold.[1]

Perhaps the best description of this marvel of architecture is that given by Rev. W. Butler, D.D., in the third chapter of his *Land of the Veda.* He gives the name of the queen in whose memory it was erected, Moomtaji Mahal,[2] and the architect, who, it seems, was a Frenchman, Austin de Bordeaux, and who also built the palaces at Agra and Delhi.

He is eloquent in his description of the whole structure, and[3] speaks of the echo of the dome as "more pure, prolonged, and harmonious than any other in the world." One writer is quoted as saying that, "of all the complicated music ever heard on earth, that of a flute played softly in the vault below, where the tombs are, as the sound rises to the dome, amid a hundred arched alcoves, and descends to the floor above in heavenly reverberations, is perhaps the finest to an inartificial ear. We feel as if it were from heaven and breathed by angels. It is to the ear what the building itself is to the eye." Then, on another page[4] he tells us that "on the end of the tomb, facing the entrance, are the words: 'And defend us from the tribe of unbelievers'—Kafirs; the word being a bitter term of contempt for Christians and all who reject Mohammed." And he adds: "Heaven would not answer this fanatical prayer, but has placed the shrine itself in the custody of those she hated, who enter the building freely, and smile with pity at the impotent bigotry which asked heaven to forbid their approach." He himself, "with a band of missionaries, in the presence of these words, sang the Christian doxology, while the echo sweetly repeated from above the praise to 'Father, Son, and Holy Ghost.'" This, no doubt, forms a very pretty tableau; but one is led to ask whether, after all, the Indian queen meant any more by the words *el kafireen* than a good Methodist woman would mean by the term Calvinists. The word Kafir means one who covers and hides, and, as he says, is applied especially to one who does not believe in the dogmas of Mohammed. Now, we do not believe in them, and are not ashamed of our unbelief; why, then, should we be offended by the title? Then, though the means of verifying it are not at hand, the probability is that the sentence, as it stands, is a quotation from the Koran, and is a general prayer for deliverance from unbelievers, and not any special prohibition from approach to that building. Indeed, such a prohibition would not be necessary; for Moslems do not allow Christians access to their holy places, either in Mecca, Hebron,

[1] Dr. W. Butler and Col. Anderson, in *Missionary Herald*, 1874, pp. 201–202.
[2] Ornament of the palace.
[3] *Land of the Veda*, p. 149.
[4] Do., p. 147.



DINDIGUL ROCK, FROM THE EAST.

or elsewhere. No doubt that music, as its liquid echoes floated down on those listening ears, was very sweet. Sweetest of all was the thought that the Lord Jesus was here worshiped for the first time, amid so much that was beautiful to the eye and grateful to the ear. Still, we cannot help remembering that the rightful guardians of the place, had they known it, would not have consented to the act. Was it, then, obeying the injunction to "be courteous," to take such an advantage of the permission given to enjoy its beauty? It may be replied that Christ is rightful Lord of all. True, but his way is to stand at the door and knock till they that are within open it for his admission; and we believe that he is much more glorified by waiting till the rightful owners sing his praise with their own lips, as they will one day, than to have his people thus use the property of others contrary to their wishes. When David would erect an altar on the threshing-floor of Araunah the Jebusite, though he did it at the express command of God, he first bought the property from its probably heathen owner, and paid the money, before he used it as a place for the worship of God.

Dr. Allen describes a similar mausoleum erected by Aurungzebe for his favorite wife, at Aurungabad, in the northwest corner of the Nizam's dominions. The spacious park, the aqueducts watering the shubbery, the elevated terrace, the marble structure, lofty dome, cenotaph, and marble screen around it, are all there, only on a much cheaper scale, as the cost was only $400,000.[1]

Dowlutabad is also described by Dr. Allen[2] and Dr. Burgess, eight miles northwest of Aurungabad. It is mentioned by the historian, Arrian, under the name of Tagara, two thousand years ago. Its present name is Mohammedan. The area of the walled city is nearly covered with ruins. The fort was originally a granite mountain five or six hundred feet high. One third of the way up it is scarped so as to present on every side a perpendicular cliff of a hundred and forty feet. At the base of this a deep ditch, twenty feet wide, is excavated in the rock. The only ascent is by a long, dark, winding tunnel, from two to three hundred feet long and ten or twelve feet square, hewn also in the rock. This is fortified by towers at its entrance near the base of the cliff, and comes out near its upper edge. So many side-ways turn off from it that a guide is needed for the ascent. The labor expended on this huge mass of granite must have been immense, and it could defy the assault of every foe except famine; yet it has been taken six or seven times in as many centuries.

A similar fort, though not so strong, is described by Rev. G. T. Washburn,[3] in southern India, at Dindigul, a town thirty-eight miles north northwest of Madura. It was mentioned by Ptolemy as Tangala, and sixteen hundred years later it was famous in the wars of Hyder Ali and his son, Tippoo Sahib. The English captured it in one day in 1767, and again in 1790. Its name signifies "pillow rock," and it is a great brown mass of granite from three to four hundred feet high, accessible only on one side, and crowned with a substantial fort. The engraving gives a view of it from the east. Part of the town of Dindigul is seen on the right hand of the picture.

[1] *Missionary Herald*, 1835, p. 458; 1841, pp. 311-312.
[2] Do., 1835, p. 458.
[3] Do., 1876, p. 209.

Dr. Allen describes Beejapur as formerly one of the largest and most splendid cities of India. Native writers assign to it a population of nine hundred and fifty-four thousand. Its wall is eight miles in circumference, built of hewn stone, with towers at intervals of a hundred yards, and surrounded by a deep ditch, cut much of the way in solid rock. The Jumma Musjid,[1] in which Dr. Allen lodged, is a splendid structure, two hundred and ninety feet by one hundred and sixty-five, with wings each two hundred and ten feet by forty-five. The roof is one large dome surrounded by smaller ones, and supported by walls resting on pillars. The kiblah has many extracts from the Koran, beautifully engraved in stone, and gilt. No wood is used in its construction. It was erected in A. D. 1666, by Ali Adil Shah, and is in good preservation; though only a dozen worshipers attend now at the hour of prayer, where kings and countless throngs once assembled.

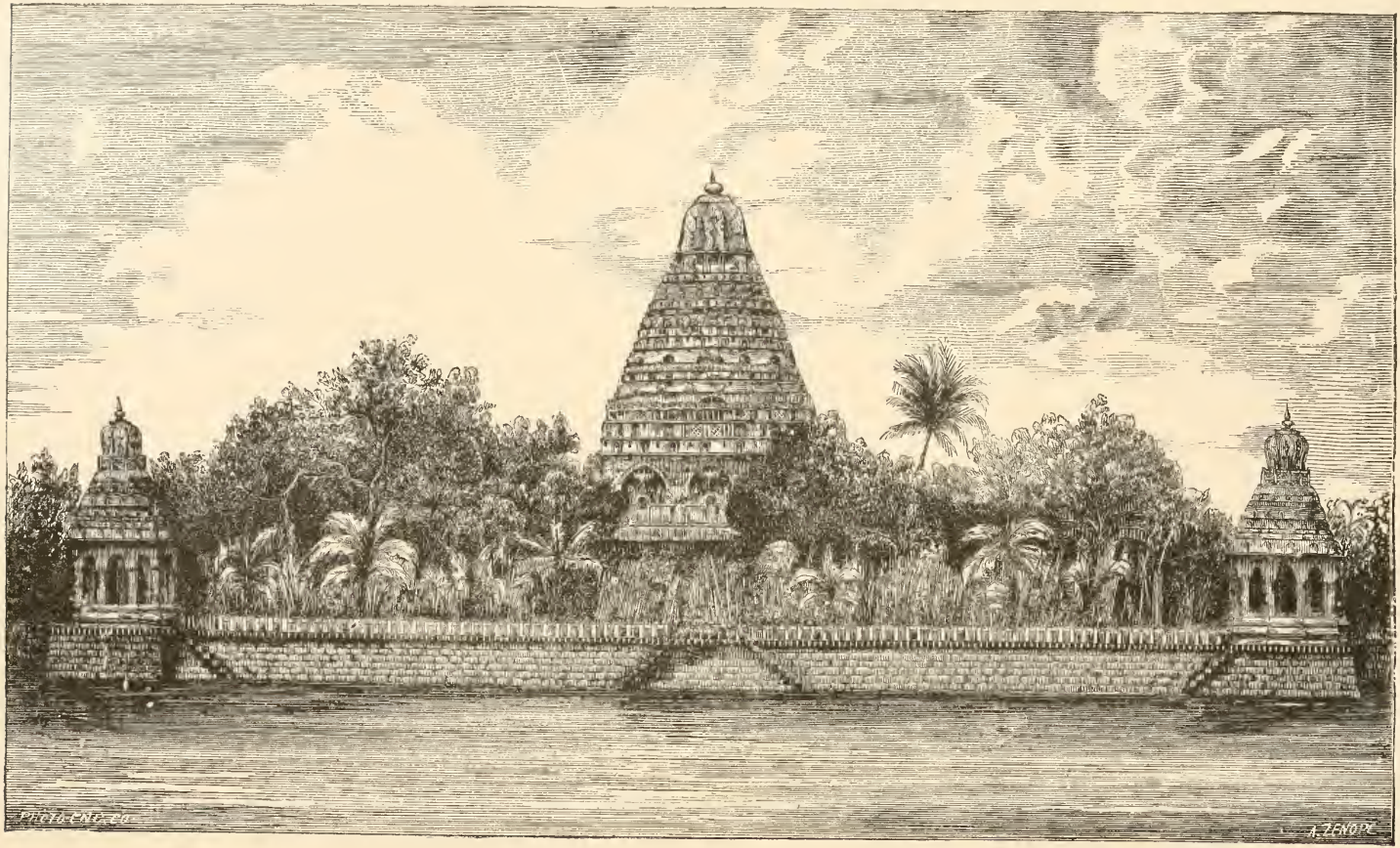
Near this is the mausoleum of Sultan Mohammed, or Mohammed Shah, two hundred and forty feet square. The interior is one vast room, covered by a single dome. On a lofty platform in the center are the monuments of himself and family, seven in all. Their bodies lie in vaults beneath. At each corner of the building is a large minaret; from these, horizontal passages extend to the base of the dome, where a magnificent view of the interior bursts on the spectator. Men on the floor appear like pigmies, yet the ceiling of the dome seems as high as from the pavement a hundred feet below, while all the upper parts of the building appear much larger. The sound of voices from the opposite side is loud and distinct. This mausoleum was erected by Mohammed Shah, who died A. D. 1660.[2]

One of the most beautiful of the holy places in Madura is the Teppa Kulam.[3] Its neat solidity and tasteful arrangement make an impression of perfect symmetry. It is twelve hundred yards square. The sides are faced with hewn granite, surmounted by a granite parapet, and midway in each a broad flight of steps leads down to the water, ornamented with mythological figures. Between the wall and the water extends a paved gallery, affording a cool and pleasant walk. In the center of the tank is a square island, visible in the engraving, faced with the same granite blocks. At its corners are small temples, and in the center of all rises a lofty-domed pagoda, the intervening space being filled with ever-blooming fruit trees and shrubbery. As the water is deep and clear, the effect of the whole is very pleasing.

Timul Naik expended in its construction $50,000, and, to meet the cost of its annual festival, endowed it with lands yielding a yearly rent of $5,000. At this festival, the parapet, island, and temples are lighted up with a hundred thousand lamps, and the idols of the great pagoda are drawn round the island for several hours, on a gaudily ornamented raft, after which they are taken to a pavilion on the island to rest from their fatigue. On a clear night, the illumination and the fire-works connected with it attract thousands of spectators from all directions.[4]

Just before his lamented death, Rev. D. C. Scudder was exploring some

[1] Great mosque. [2] *Missionary Herald*, 1837, pp. 209-210. [3] Raft tank.
[4] Rev. J. T. Noyes, *Missionary Herald*, 1872, p. 297.



THE TEPPA KULAM.—MADURA.

cromlechs among the Pulney hills. Clambering along their sides by a romantic footpath, and crossing brooks, where he noticed recent traces of elk, he found the ruins on a projecting ridge overlooking a long and beautiful valley. On a raised platform, twenty-four feet square, facing east and west, were a number of these structures, falling to ruin. They consisted of three slabs of unhewn stone placed on end, like the three walls of a house, with an immense slab covering the whole, and one end left open for a door. One of these primitive apartments measured eight feet in length by four in breadth. Crawling under the stone roof, he dug away the soil at several points with a hoe, and found a flat stone that sounded hollow beneath. There were three rows of cromlechs, and six in each row. The platform was faced with square, unhewn stones, to the height of three feet. Two rods down the hill were several others, but not faced like this one. Next day he uncovered one of the floor slabs, a foot in thickness, three feet wide, and five in length, but he could not move it to learn what was beneath.

Two miles distant he found on another projecting spur of the mountain a similar platform and cromlechs, larger and better preserved. One perpendicular slab was eight feet high, six feet long, and a foot and a half thick; and abreast of it were two rooms, each six feet by three, and four feet high, but roofless. On the opposite side of the square stood another row, very ruinous, and at one end of it a smaller one, facing at right angles to the others. The slabs evidently came from the stratified gneiss of the mountain close by, which naturally splits into such blocks, and the places where they came from were plainly marked. Mr. Scudder longed to excavate below the floors, but had not the means for that. Their antiquity is doubtless equal to the Celtic ones in Britain. The natives here have no tradition about them.

Near a village belonging to Mânâ Madura, the rims of a dozen earthen pots a foot and a half or two feet in diameter projected above the surface of the ground. He dug up one, found it two feet deep and full of gravel. In the bottom he found two small pots, of a form now unusual, and in one was the half of a skull, its form preserved by the earth in which it was embedded, with some teeth and remains of other bones. He opened four more, and in each found bones, though all were exceedingly decayed. On the outside of one were a number of vessels of various forms, one like a finger-bowl. No one knew anything about the origin of the jars, but it was manifestly an ancient grave-yard. There was a tradition that it belonged to a caste that was buried alive, with a little rice and water in the cups — manifestly a mere guess.

Two months later he found an old mud fort near his own home at Periakulum, and close by some circles of rough stones like those found in Dindigul. Not far off he heard of some pots larger than those just described. A native picked up near them a rusty iron weapon like a cleaver, and another had ploughed up a piece of iron like a sword, and in a small stone house had found a horse made of pottery, much superior to those manufactured now. Setting off himself, he found a cromlech about six feet by three, choked up with dirt, and, by digging, several earthen vessels were brought to light. In one end of the structure was a round hole, with a stone set up against it outside, like some on

the Nilagiris. It is supposed that the body was introduced through this opening. Among other discoveries he made was a pot on four legs, and two large pots, like those at Mânâ Madura, lying on their sides, facing the door, with many fragments of others. He also found some covers for the pots, and some pieces of iron too much destroyed by rust to determine their exact shape ; also some bones. He thought, also, that decayed bones were the cause of a white powder in the soil. The room faces due east, and the slabs are six feet thick by seven or eight in height. The end ones are three feet wide by seven in height. There is no place where they could have been brought from nearer than a mile. These are the dry bones of several sprightly letters filling eleven pages of his memoir.[1] See Rev. W. Tracy's account of similar tombs and cromlechs, six years later, in *Journal American Oriental Society*, Vol. IX, p. xlv. He thinks the urns, and apparently the cromlechs also, are Buddhistic.

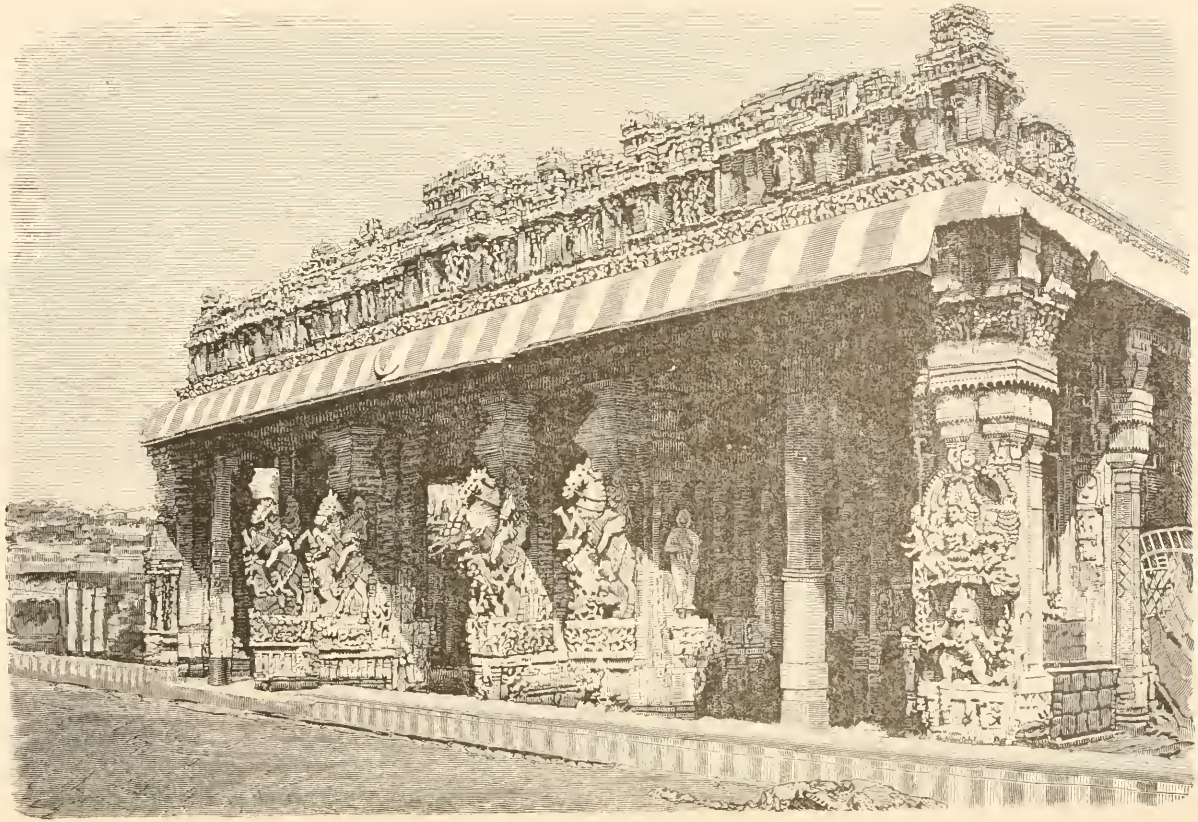
Rev. E. Burgess describes the celebrated caves of Ellora.[2] These are a mile in length, containing twenty-three excavations, three of them two stories high, and one three stories. Nine of them are each more than a hundred feet long, but the average size is eighty-one feet by fifty-two. Pillars, round, square, and octagonal, are left at regular intervals to support the roof, and the walls are covered with images of the gods. One called Kylus[3] is a complete temple, with its rooms, verandas, domes, and spires cut out of the rock. A passage fourteen feet wide and forty-two feet long leads from the outer court to an inner one two hundred and forty-seven feet by one hundred and fifty, and in the center of this stands the great temple, one hundred and forty feet by ninety-five, and ninety feet to the highest turret. A veranda twenty feet wide extends along the back of the court and half-way down its sides ; the wall is covered with sculptures.

The temple of Minatchi, at Madura, is described by Rev. J. R. Eckard[4] and by Rev. W. Tracy.[5] A granite wall, thirty-seven feet high, surrounds a court eight hundred and forty feet by seven hundred and twenty. The gate-way towers, represented in the engraving, are one hundred and fifty feet high, three of them completely encrusted with bas-reliefs of the gods. Within this wall are nearly fifty granite buildings. The stone roof of one of these rests on a thousand granite monoliths. One is now building, at an estimated cost of 700,000 rupees. When Tirumal Naick repaired this temple, in the early part of the seventeenth century, he endowed it with an annual income of 223,500 rupees.

Across the street from the great temple of Minatchi is the Puthu Mandapam, or new choltry. It is also called Vasanta,[6] because built as a cool retreat for the god Siva in May, their hottest month. It is three hundred and thirty-three feet long by eighty-one in width, divided in the interior into a nave and two side aisles. In beauty of finish it excels all other structures in Madura. The flat roof is composed of immense granite slabs, resting on one hundred and twenty-eight pillars twenty-five feet high, each hewn from a single block

[1] *Life and Letters of Rev. D. C. Scudder*, pp. 356–366.
[2] Do., 1841, pp. 311–312. See, also, Dr. Allen's *India, Ancient and Modern*, pp. 391–396.
[3] Paradise. [4] *Missionary Herald*, 1836, p. 169. [5] Do , 1868, p. 105.
[6] Spring.

EASTERN GATEWAYS OF HEATHEN TEMPLE, MADURA.



NEW CHOLTRY.

of granite, and carved in Hindoo style. The labor of carving and of erecting them in position must have been enormous. Among the ornaments are ten groups of stone sculptures, representing the ten Pandian kings, of heroic size, with their wives in smaller figures. A massive platform in front, with twelve pillars smooth as glass and black as jet, supporting a canopy, are wrought out of black Madura granite, a dark Syenite sprinkled with a green variety of Scapolite. (See engraving.) The work was begun in 1626 by Tirrumala Nayagan,[1] who was crowned king of Madura in 1623, and reigned thirty-six years; and was finished in seven years, at a cost of £20,000. Others say it was twenty-two years in building, and cost more than a million sterling.[2]

Rev. Dr. Winslow describes the gate-towers of the temple at Seethumbarum[3] as peculiarly magnificent. They are three hundred feet high, and the granite lintel of one, more than thirty feet above the threshold, is twenty-five feet long. Inside of this the temple looks like a city, so numerous are the buildings. There, too, is a choltry, whose thousand granite pillars support a solid granite roof. Does this illustrate Solomon's house of the forest of Lebanon?

Rev. W. Tracy describes the pagodas at Seringham,[4] where are a thousand houses for Brahmans, with a choltry like that described above. The treasures connected with it are a palanquin covered with plates of fine gold, a crown, and back and breastplates of fine Venetian gold; fingers and toes of rubies, aigrettes set with diamonds, necklaces and bracelets of topazes and pearls, one bird made of pearls and another of gold and diamonds, and various vessels of pure gold, all valued at 1,312,500 rupees.[5]

In the interior of Sumatra, at Pogaruyong, not far from Padang, Rev. J. Ennis found in front of the dwelling of the chief, three stones seven feet by four, with inscriptions in the ancient Kawi character. The largest one has thirty lines, each containing about sixty letters. The stone is very hard, the workmanship superior, and the straight lines and graceful curves showed that the chisel had been held by hands more skillful than those of the present inhabitants. The face of the whole country is covered with ancient monuments. Fortifications, mounds, walls, and roads appear everywhere, overgrown with trees, and of these antiquities the natives have only the slightest and most unsatisfactory traditions.[6]

A pagoda in China is not strictly a temple, though a temple may be connected with it. The native account of the erection of the first structure of the kind in China may help us to form an idea of its character and object. In the year A. D. 260, Kang-tsung-huei, a Buddhist priest, appeared at Nanking, and performed many wonderful feats. He told the emperor that Buddha had left many relics, whose miraculous power was great; and the emperor promised to build a pagoda for it, if one could be procured. A bone of Buddha was brought in a bottle, and its radiance lighted up the palace. In his eagerness to examine it, the emperor poured it into a copper basin, which was instantly broken by its touch. The priest assured the king that this was only one of its wonderful powers, for diamond could not scratch, fire burn, or the heaviest maul

[1] Probably same as Tirumal Naick, p. 170.
[2] Rev. J. T. Noyes, in *Missionary Herald*, 1873, pp. 241–242.
[3] Do., 1837, p. 361.
[4] Do., 1839, p. 23.
[5] $656,250.
[6] *Missionary Herald*, 1838, p. 370.

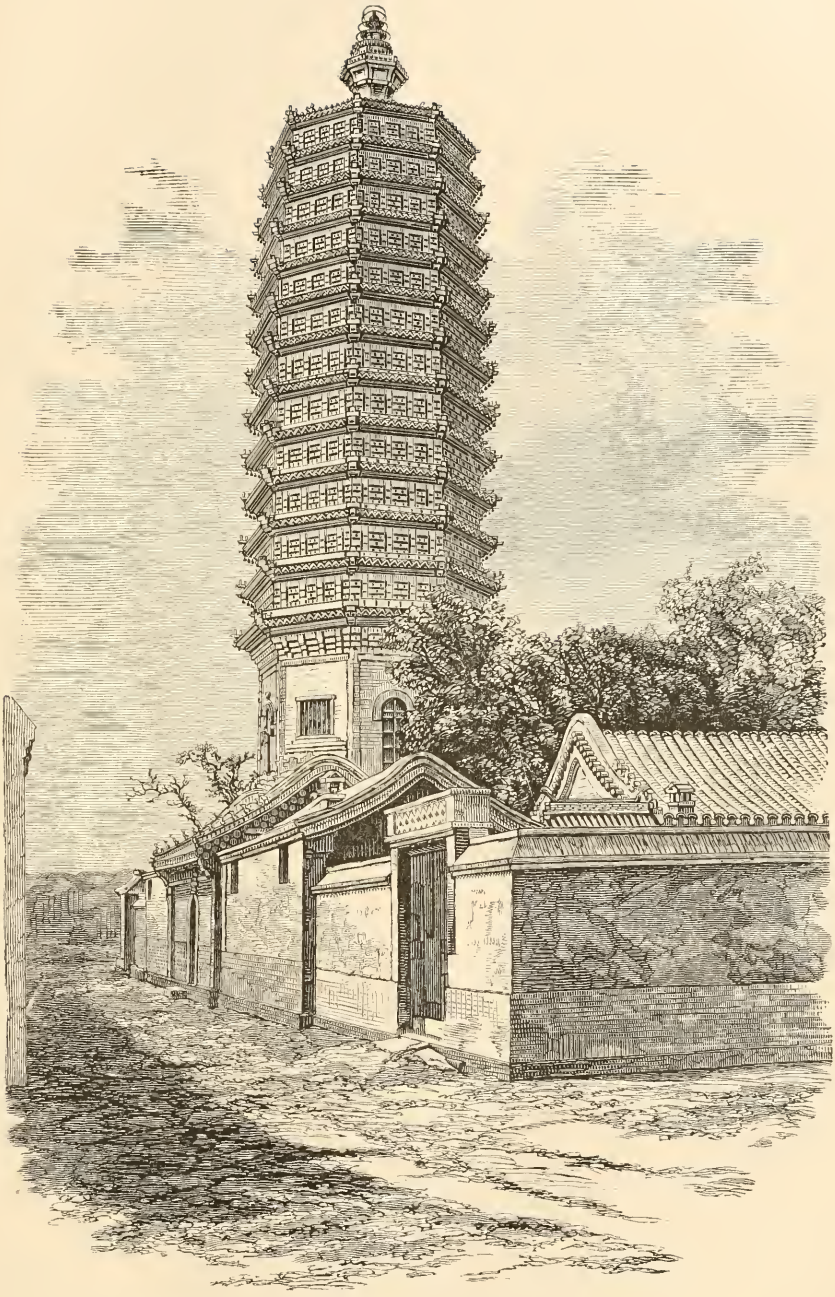
break it. The story goes that the emperor ordered an athlete to pound it with a sledge-hammer. The sledge flew into fragments, but the relic was as entire and effulgent as ever. So the emperor built the far-famed porcelain tower of Nanking to enshrine the wonderful relic. This was one of the most beautiful structures ever built in China, costing, it is said, $3,000,000. Its nine stories flashed the sunlight from their crystal surfaces, and its clear-toned bells, rung by the wind, made pleasant melody, till the Taeping rebels destroyed it in 1856.

These buildings are supposed to ward off evil and secure the favor of Buddha. The devout Buddhist believes that business will be brisker, crops more abundant, education more flourishing, and general prosperity more marked where such structures are found. They vary in height from fifty to one hundred and fifty feet, and the number of stories varies from five to thirteen, though seven or nine is the favorite number. They are generally built of brick or stone, sometimes solid and sometimes hollow, and provided with stairs.

The one in the engraving stands near the northern wall of T'ung-cho; is built of coarse brick, and has thirteen stories. It is forty feet in diameter and one hundred and fifty feet in height. T'ung-cho is twelve miles east of Peking and seventy miles north of Tientsin, and has been one of our mission stations since 1867.[1]

The celebrated Nestorian inscription in China, as it has been translated by one of our missionaries, Rev. E. C. Bridgman,[2] demands mention here. It was discovered by a Chinese workman, in the year A. D. 1625, in or near the city of Singan fu, which for many centuries was the capital of the empire, and was such at the time this monument was erected, A. D. 781. The city is situated on the river Wei, latitude 34° 16′ north, and between 109° and 110° east longitude. The tablet is a slab of marble, about ten feet by five, with a pyramidal cross on top, and was found covered by rubbish, but was at once removed to a temple by the Chinese magistrates. It contains a Chinese inscription in twenty-eight lines, with twenty-six characters in each line, besides a heading over the top in nine characters, and another on the right side in seventeen. Dr. Bridgman gives Kircher's translation in Latin, Dalquie's in French, and the original Chinese, besides his own version in English. The whole is printed in four columns, covering two pages, all visible to the reader on the opening of the book. Twenty-two pages are thus filled with the inscription and translations, and five pages more are occupied with notes by Dr. Bridgman. Some of these notes, and the whole of Dr. Bridgman's version, are given in the *Middle Kingdom*.[3] Dr. J. Murdock, in his edition of *Mosheim's Ecclesiastical History*,[4] says that at the bottom is a Syrian inscription in Estrangelo characters, containing a catalogue of Nestorian ecclesiastics. The inscription is partly historical and partly theological, giving an account of the creation and the incarnation, and of the attitude of a number of the Chinese emperors toward the religion of Christ, some of them favoring it and sending gifts to the

[1] A. O. Treat, M. D., in *Missionary Herald*, 1875, pp. 369-371.
[2] *Chinese Repository*, Vol. XIV, pp. 201-229: Vol. XIX, p. 552.
[3] Vol. II, pp. 291-297.
[4] Vol. I, p. 422, note.



A PAGODA AT TUNG-CHO.

church, and having their portraits hung upon its walls. It is interesting to notice that it calls the Magi who visited the Babe in Bethlehem, Persians; and among other things said of the disciples after Christ had left the earth is this: "They beat the wood, sounding out the voice of benevolence and mercy." Dr. Bridgman, in his note on this, says it alludes to some usage with which he is unacquainted. Does it not refer to the piece of sonorous wood suspended in some eastern churches too poor to own a bell, which is struck by a mallet in order to summon the people to prayer? The inscription mentions a persecution by Buddhists in A. D. 599, and another slight opposition in A. D. 713. It speaks of Olopun as a man of superior virtue, who made his way through dangers, bearing the Holy Scriptures, and arrived at Chang ngan, one of the districts in the department of Singan fu, in A. D. 736. There was a metropolitan in Peking by that name in A. D. 714. The missionary labors of the Nestorians ceased when the Mongols were expelled in A. D. 1369, and some have thought that all trace of their labors had disappeared; but a missionary in Ningpo tells of a stranger coming to his chapel from a western province,[1] and listening attentively, who after service said that he and his ancestors worshiped only one God, the Creator. He knew of Moses and Jesus; said he was not a Romanist or Moslem, but that his doctrine had been handed down from many generations, and that thirty families in his town belonged to the same religion. Was not this a living witness to the fruitfulness of labors put forth many centuries before, by Nestorian missionaries, fit to go along with this marble testimony to the same?[2]

[1] Singan fu is west of Ningpo.

[2] *Dr. Grant and the Mountain Nestorians*, p. 51.

VIII.

CABINETS AND CUNEIFORM INSCRIPTIONS.

THE contributions of missionaries to our museums and cabinets demand our notice. The Missionary Museum at the Congregational House in Boston is a rich treasure for the student in natural history, especially in conchology and mineralogy. Messrs. Bingham, Thurston, Goodrich, and Coan have sent contributions from the Pacific, Messrs. Beadle and Wolcott from Syria, Drs. Dwight and A. Smith from Turkey, Rev. D. T. Stoddard, Drs. Perkins and Wright from Persia. Dr. Winslow, Dr. Fairbanks and Rev. H. J. Bruce from India, and Dr. S. W. Williams and others from China, with many more. Besides idols from heathen lands, it contains many weapons of war, instruments of agriculture, and household utensils; and among its illustrations of archæology are an ivory image Dr. Grant obtained in the mountains of Kûrdistan, and the base of a marble fountain from Tripoli in Syria, brought home by the writer, containing the lower extremities of a statue, and the end of a club carved into the likeness of a head, from whose mouth the water issued.

The Rev. M. Hopkins, D.D., LL.D., thus writes of missionary contributions to Williams College: "Like other institutions, we had, quite early, numerous specimens of clothes, clubs, spears, oars, and the like, from the Sandwich Islands; native iron from Africa, and spears made from it; also specimens in geology, mineralogy, and botany; but the things most worthy of notice are the specimens of Assyrian sculpture sent by Dr. D. W. Marsh from the palace of Sennacherib, in Nineveh, which he obtained from Mr. Layard for the college. They are among the very finest, and were the first brought to this country. They made quite a sensation, and determined other institutions to obtain similar ones, if possible. In this several of them succeeded, and so that branch of study, since pursued with so much zeal and profit in our land, we owe to our missionaries. We are greatly indebted to Dr. Marsh, and much credit is due him for his zeal and care in the matter. He had to saw the slabs into sections small enough to be carried on the backs of camels to the Mediterranean."

In the Woods Natural History Cabinet at Amherst College is a collection of more than twelve hundred minerals, chiefly from Asia, sent mostly by missionaries, and numerous enough to give a tolerable idea of the geology of Syria, especially Mount Lebanon; also of northwestern Persia, and the Ghauts of India. They were sent by Revs. P. Fisk, S. Hebard, G. B. Whiting, D. Bliss, and H. B. Morgan, of Syria; Drs. B. Schneider, H. J. Van Lennep, and C.

Hamlin, Revs. P. O. Powers, J. S. Everett, O. P. Allen, H. A. Homes, and H. Lobdell, M.D., of Turkey, and H. Hallock, of Malta and Smyrna; Revs. J. Perkins, D.D., J. L. Merrick, and D. T. Stoddard, of Persia; Rev. Dr. D. Poor and N. Ward, M.D., of Ceylon; Rev. E. Burgess, of Ahmednuggur; Rev. Dr. E. Bridgman and Dr. I. McGowan, of China; and Revs. J. Goodrich, E. Spaulding, and A. Chapin, M.D., of the Sandwich Islands. Dr. Van Lennep sent a geological map of the region round Smyrna, and some fragments of sculpture from Ephesus; and Dr. Perkins, when other materials failed, used extra articles from his wardrobe to pack his specimens safely.[1]

Since that volume was published,[2] many and valuable specimens have been received. Dr. E. Hitchcock, Jr., writes: "Rev. W. Walker, of the Gaboon river, in western Africa, sent a skeleton and skin of the gorilla, which at that time were worth a thousand dollars, as but few specimens existed either in Europe or America. Rev. J. Tyler, of the Zulu mission, sent hundreds of specimens of the rare quadrupeds of South Africa. The unique horns he sent have done more to ornament the cabinets than any other contribution. Among his gifts were a fine lot of skins and skeletons of the cony, the feeble folk of Proverbs xxx: 26, which are very difficult to obtain, either in Syria or South Africa; and also a monster boa constrictor, with a number of other serpents.

"Dr. S. R. Brown, of Japan, has sent us the male and female of the giant crab, the largest that, so far as we know, has ever existed, and a quantity of the spun-glass corals[3] found near Yokohama. Rev. H. J. Bruce, of Satara, India, has furnished valuable specimens of birds and mammals, including bats; and his skill in preparing the skins is remarkable. The sons of the late Rev. H. Ballantine have secured hundreds of specimens of Indian birds. Rev. C. Hartwell has sent many valuable shells, plants, and minerals from Fuhchau, in China, and Rev. D. Bliss has performed like service for the cabinet in Syria."

The Nineveh Gallery of Amherst College is a monument to the memory of Rev. H. Lobdell, M.D., for its contents were almost all procured by him. It is sixteen feet by twelve, lighted from the roof, and paved with imitations of Assyrian bricks. It is paneled to the height of seven feet with slabs from Nimrûd. Above this are reproductions, in stucco, of some of the best of the Assyrian sculptures.

The slabs are, first, a richly dressed human figure with the wings and head of an eagle, which some identify with the Nisroch of 2 Kings xix: 37; second, an idol with two horns lying horizontally, one above the other, on his mitre, or crown. It is seven and a half feet high, with large wings growing out of his shoulders, a basket in his right hand, and in his extended left hand a cone, or pine-apple. The sacred tree is on this slab as well as on the first, and across its entire breadth is a belt of cuneiform inscription eighteen inches wide. The third differs from it only in having three horns bent round the tiara, one above the other. The fourth represents King Assur-nazir-pal[4] with a bow in one hand and a censer in the other, as if offering incense on return from war. The

[1] *Reminiscences of Amherst College*, by President Hitchcock, pp. 75–77. [2] 1863.
[3] Hyalonema [4] Literally, the god Assur is the protector of his son.

fifth resembles the second and third, except that his head is covered with fillets. The left hand holds what seems to be a branch of the sacred tree, and the right is lifted as if in worship. The sixth is the same as the first.

In this gallery are three horizontal cases filled with various Assyrian and Babylonian relics; also several large bricks, some from the palace of Assur-nazir-pal, at Nimrûd, and some from Babylon; also a number of beautiful agate and chalcedony gems from Mecca and Greece; Babylonian, Assyrian and Sassanian cylinders; Sassanian, Persian, Greek, Hebrew, and Cufic seals; fragments of alabaster jars, of a winged bull, one of these last containing a fossil Pteroceras, also many inscriptions from Babylon. There are fifteen Greek silver coins, twelve of them of Alexander the Great, thirty-one of the Seleucidæ, eighteen of the Arsacidæ, three of the Sassanidæ, sixty-three Roman coins, from Vespasian to Alexander Severus, and eight Cufic. Of antique copper coins there are thirteen Greek, forty-eight Roman, forty-nine of the Eastern Empire, and two hundred and sixty Cufic, besides other things.

Miss L. W. Shattuck, who has charge of the cabinets of natural science in Mount Holyoke Seminary, writes: "Our gifts from missionaries have been so numerous, and have extended through so many years, that it is almost impossible to give a full account of them. When I began the botanical collection here, I found hundreds of plants in the bundles just as they were sent. I have had them put up carefully in large tin boxes, but I do not know who sent them. From China, Ceylon, Persia, Palestine, Turkey, Spain, Africa, Labrador, and some of our North American Indian missions, many valuable collections of plants, woods, and seeds have come to us, and beautiful collections of algæ and ferns have been sent from numerous localities. In the department of zoölogy, we have from Africa birds, serpents, fishes, shells, eggs, insects, and horns and skins of quadrupeds; from India, shells and birds; from the Marshall and Sandwich Islands, shells and corals; and the same from Burmah, China, and Japan. Rev. Mr. Bruce and Rev. Dr. Fairbanks have sent hundreds of specimens, both in zoölogy and botany. It would leave an immense gap in all our cabinets to take away our missionary treasures. The incidental work done by our devoted missionaries for the advancement of human knowledge would compare favorably with all that governments have done who have made that the sole object of national exploring expeditions."

Accompanying the above is a list of thirty-one missionaries who have sent curiosities from all parts of the world. Minerals were also received from Rev. C. F. Muzzy, India; Mrs. M. A. J. Chamberlain, Sandwich Islands; Mrs. A. G. Gulick, Spain; Mrs. B. Labaree, Persia; Rev. Dr. Chamberlain, Rev. W. B. Capron, Rev. H. J. Bruce, and Mrs. M. Anderson, India; and Mrs. J. Ballagh, of Japan.

George Champion sent specimens of mineralogy and natural history to the cabinets of Yale College, from South Africa. Rev. G. H. Apthorpe sent a valuable collection of corals from Ceylon. Rev. J. Goodrich sent a collection of specimens of lava and sulphur from the volcanoes of Hawaii.

The writer has made repeated applications for information from the college itself, but so far has received only promises of future communications, perhaps because of the lack of material to report.

To the list of these contributions of Assyrian antiquities to our college cabinets is appended the following communication from the pen of one who, but for his connection with missions, had never taken any interest in such studies.

CUNEIFORM INSCRIPTIONS.

The difficulty of deciphering cuneiform inscriptions to-day is nothing compared to what it was at first. Mons. P. E. Botta was the first to bring to the light of day the buried wonders of an Assyrian palace. After working all day in the trenches at Khorsabad,[1] under a scorching sun, he spent the evening, and indeed many subsequent days, in the effort to find a clue to the meaning of the records which he transcribed so carefully. He classified the characters noted resemblances between them, and the frequency of the occurrence of those that were often repeated, but after all his labor he could not decide whether they should be read like English, from left to right, or like Hebrew, from right to left, though he felt satisfied that they must be syllabic and not alphabetic.

Compared with the difficulties of those days, we may say that they are now read with ease. The wonder is that any had courage and perseverance enough to attack the difficulty and conquer it; and yet, compared with other studies, the difficulties are still so great as to dishearten anything short of the most hearty devotion and unflinching perseverance.

It is not with any design of discouraging the study, but rather in order to induce those who are looking in that direction to count the cost, and summon up the resolution requisite to success, that we venture a few remarks on the difficulties of deciphering the cuneiform inscriptions.

The first to confront the student is the great number of the characters. The syllabary of Prof. A. H. Sayce gives five hundred and twenty-two; but of many of these he gives more than one form, and yet this by no means exhausts the list. Even a tyro finds characters which he cannot identify with anything there. It is exceedingly difficult to keep in the memory only the more frequently recurring forms, especially when they resemble each other in general appearance, and differ only in some point not apparent without close examination.

This, however, is not the worst of the difficulty. Some of these represent almost as many sounds as an ordinary alphabet. , the first in the list, according to Prof. Sayce, has twenty values: seven Accadian, and thirteen Assyrian. Another, , has four Accadian values and fifty-one Assyrian — fifty-five in all. This is an extreme case, yet there is no character that has only one value. This is disheartening, unless one makes up his mind to turn to the

[1] Bit Sargina, the house of Sargon.

syllabary in every doubtful case; but what if none fit it? or, worse yet, if several fit it equally well?

The different value in Accadian and Assyrian calls for explanation. The Accadians[1] came originally from Media, on the northeast, and settled in Babylonia. Their language was Turanian, not Shemitic, and they seem to have been the inventors of the cuneiform system of writing. Originally hieroglyphics, copying the form of the object described, these were soon changed for the easier and angular cuneiform; and when the Assyrians subdued Babylonia, they appropriated the written characters of the conquered, with a simplification of the form and a variation in the value; for the same character was applied to the same object in both languages, and so represented different sounds as it was read by the two nations. Beginning with visible objects, this diversity extended to other parts of speech. Then, having thus commenced the use of polyphones, they went on enlarging the number, using affixes, and sometimes prefixes, to specify the pronunciation required. In this way polyphones came to be used in different words in the same language, and a certain collocation of different characters determined the pronunciation of both. Thus, 𒀀𒌋 is ood or doo, or par or tam, or eight other sounds; but after 𒁹 which is mat, or sad, or lat, etc., it denoted that 𒁹𒀀𒌋 was to be pronounced Aksood = I conquered.

There are many sources of this diversity in the value of characters. One is the use of the same one both as a syllable and as an ideograph, or sign for a word. Thus, 𒈨 may be the syllable moo, or the ideograph soom = name, or sanna = a year; and 𒀀𒌋 may be as above, or the ideograph oomma = day, sometimes pronounced yoomoo, like the Hebrew and Arabic. 𒄀𒌋𒁕 is the syllable si, or the ideograph enu = eye.

Another source of this diversity is the use of certain characters as determinatives, denoting that the word following belongs to a certain class of objects; *e. g.*, 𒀭𒌋 is the syllable an, or it is the ideograph Il = God; or, as a determinative, it denotes that the word following is something divine; *e. g.*, 𒀀𒌋 is yoomoo, = day, but 𒀭𒌋𒀀𒌋 is Samas = the sun, reverenced as a god. 𒀭𒀝 is the syllable im or ni, or the ideograph Roohhoo = wind, or breath, or spirit; but 𒀭𒌋𒀭𒀝 is Vul, or Rammanu, the God of the Atmosphere (2 Kings, v : 18). 𒀭𒊩 may be the syllable ir, or aloo = city, or a determinative, denoting that the word following is the name of a city; *e. g.*, 𒀭𒊩 𒉌𒌋𒁺𒌋 Ninua = Nineveh; literally Fishtown; 𒀭𒊩 𒄀𒌋𒄭𒄩 𒁹𒌋 Di-mas-ka = Damascus; 𒀭𒊩 𒌋𒋗𒌋𒄿 𒁹𒌋𒄭𒄩𒊩𒀝𒀀𒌋 Ur-sa-li-im-mu = Jerusalem. 𒀀𒌋 is the determinative for proper names; *e. g.*, 𒀀𒌋 𒄩𒄩𒁺 𒄩𒄩 𒄩𒄩 𒄩𒄩𒄩𒄩𒄩 Kha-za-qi-a-hoo = Hezekiah.

Another source of this diversity is the use of the same characters for num-

[1] Literally, Highlanders.

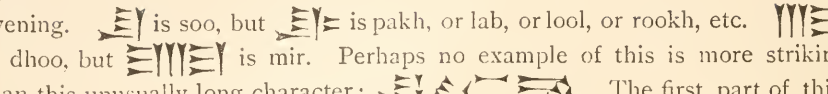
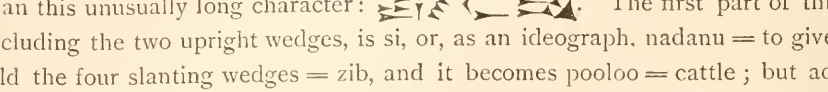
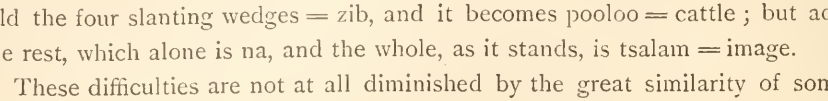
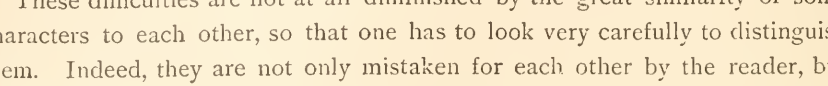
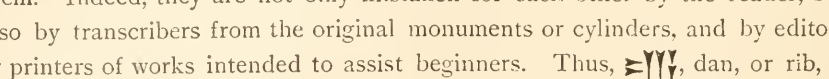
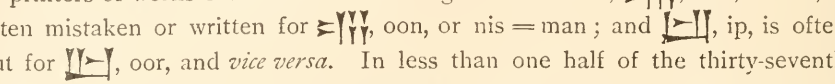
bers and for syllables or words; *e. g.*, is Sa, the relative pronoun, or gar; and it is also irbu, denoting four. is Sana, and that also is irbu = four; Hebrew and Arabic, Arbaa. is u, or va = and. It is also Esirtu, masculine, or Esru, feminine = ten; Hebrew and Arabic, Asher, Ashra. is the syllable mun, or nis, or the ideograph for Tsar = king, or Esraa = twenty. is the syllable me or sib; the ideograph for assembly, or for tongue, by which an assembly is called, or for Kalu, the verb to call or summon. It is also me = one hundred; Hebrew, Mæah; Arabic, Meeah. There is still greater uncertainty about . As a syllable it is dis or tis; as an ideograph, ana = the preposition to; and as a numeral, either akhadoo, or edu, or estin, masculine, ikhit, feminine = one; or it may be soossoo = sixty, for the soss was a unit among the Babylonians and Assyrians.

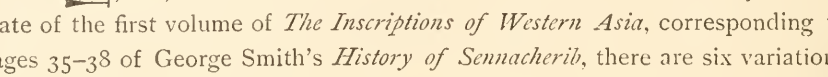
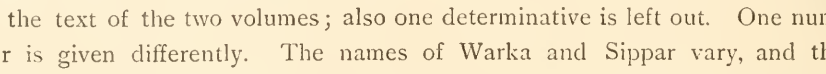
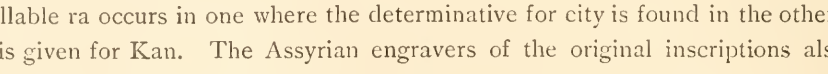
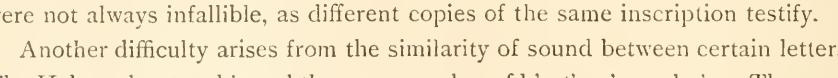
There is a curious illustration of this diversity in the names of some of the gods; *e. g.*, is, as a syllable, ess; as an ideograph, Bit = house; as a numeral, Silasaa = thirty; but is Seen = the moon, one of the chief gods of the Babylonian and Assyrian Pantheon, being masculine, and the eldest son of Bel, while Samas, the name of the sun, is feminine; and is Khamisserit = fifteen, but is the goddess, Istar, that takes the place of both Venus and Bellona; for she presides over both love and war, and was the favorite goddess of some of the Assyrian kings, especially of Assur-bani-pal.

Another fruitful source of diversity is the interchange of M and V; *e. g.*, may be either ma or va, and scholars debate whether to read Akmoo or Akvoo = I burned. So also there is a like uncertainty in the reading of some forms of what is called the mimmation of words; an intensive form corresponding to the Arabic tennween, or nunnation, which adds n to the a, e, and u of the three cases, as this adds m.

The Assyrian mode of writing, without capitals, punctuation marks, or spaces between words and sentences, is another source of very great difficulty to the reader. He never knows where one word ends and another begins, but has to puzzle it out as best he can; for a line may often be divided up in more ways than one, and characters may be used either to denote syllables or ideographs. One help, however, is afforded us in our perplexity. A line never ends in the middle of a word. If the last word is too short to fill it out, the characters are dilated horizontally to fill the space. If too long, they are crowded together more closely, or an ideograph is used instead of several syllables. The Jews dilated or contracted their letters in the same way, but they had no ideographs.

It also is a source of great perplexity, that the structure of a character gives no clue to its sound. With us a p is ap, and a p t, apt, but it is not so in Assyrian; *e. g.*, is i s, but with prefixed, , it is lam; is eru = brass; but with the same prefix it becomes soon = their, and , Kha, before it, makes it goog = worried. is lib = heart, but

 , though just distinguishable, is roo or nadanu = to give, or isbu = evening.  is soo, but  is pakh, or lab, or lool, or rookh, etc.  is dhoo, but  is mir. Perhaps no example of this is more striking than this unusually long character:  . The first part of this, including the two upright wedges, is si, or, as an ideograph, nadanu = to give; add the four slanting wedges = zib, and it becomes pooloo = cattle; but add the rest, which alone is na, and the whole, as it stands, is tsalam = image.

These difficulties are not at all diminished by the great similarity of some characters to each other, so that one has to look very carefully to distinguish them. Indeed, they are not only mistaken for each other by the reader, but also by transcribers from the original monuments or cylinders, and by editors or printers of works intended to assist beginners. Thus,  , dan, or rib, is often mistaken or written for  , oon, or nis = man; and  , ip, is often put for  , oor, and *vice versa*. In less than one half of the thirty-seventh plate of the first volume of *The Inscriptions of Western Asia*, corresponding to pages 35–38 of George Smith's *History of Sennacherib*, there are six variations in the text of the two volumes; also one determinative is left out. One number is given differently. The names of Warka and Sippar vary, and the syllable ra occurs in one where the determinative for city is found in the other; e is given for Kan. The Assyrian engravers of the original inscriptions also were not always infallible, as different copies of the same inscription testify.

Another difficulty arises from the similarity of sound between certain letters. The Hebrew has two h's and the same number of k's, t's, s's, and z's. The same is true of the Syriac. The Arabic has three h's, two d's besides Dhad, two t's, two k's and s's besides Ain and Ghain. It is to be expected that there will be confusion in distinguishing these sounds in the Assyrian, especially as that language seems to change the sounds of characters evidently corresponding with Hebrew consonants in certain words common to both languages. So different Assyrian scholars write the same characters differently in English letters. And the syllabic character of the language greatly increases the difficulty, nor is that difficulty diminished by the crowded lines of many inscriptions, making the distinction between letters very obscure; for often it is almost impossible to decide whether a wedge or wedges belong to the character preceding, changing, of course, its value, or to the one that follows, making out of it an entirely different sound.

Again: Prof. Sayce's *Syllabary* gives the Accadian and Assyrian renderings of characters, with their meaning in English; but, out of his five hundred and twenty-two characters, thirty-nine have no Accadian rendering. Seven have no Assyrian, and forty-six have no English meaning assigned to them; twenty-six have neither Assyrian rendering nor meaning in English; and eighteen have nothing whatever but the bare character — no sound given to it, either in

Accadian or Assyrian, and no definition in English; a mere testimony that the character exists, and, so far, defies all attempts to understand it, while many of the pronunciations and renderings that are given are marked as doubtful.[1]

Then, the same character has very different forms in different inscriptions. It is like puzzling out bad chirography in English manuscript to try to read some of them, so great is the variation. Even the same character does not always look alike in the same inscription; now, this part of it is enlarged and that made small, and then the large and small are reversed in another occurrence of the same character. We can guess that , ûm, and are the same, and we learn from that short perpendicular wedges may sometimes take the place of those that go from top to bottom of the line. Other specimens might be given of characters yet more unlike, but still identical, could types be procured that would truthfully set forth the want of resemblance. Who would suppose that and were the same character? Yet, on close inspection, one recognizes the three perpendicular wedges and the two slanting ones in both. sa, as ordinarily printed, is in the inscriptions of Sennacherib, *Inscriptions of Western Asia*, published by the British Museum, Vol. I, and , na, becomes there .

These are some of the difficulties in the prosecution of such studies, yet they are by no means insurmountable. Indeed, this grouping of them together may make them appear greater than they really are; for they are to be met only one at a time, and, that one being overcome, the learner is ready to advance to victory over others in their order; and in spite of them, there is a strange fascination in searching out the meaning of words graven by hands that more than twenty-five hundred years ago moldered into dust. Just as in our own tongue we distinguish at once between the ball that is tossed from hand to hand, and the ball that is kept up all night long by merry dancers, so here, without any special marks, the learner gradually comes to distinguish between things that differ; and such works as Prof. A. H. Sayce's *Lectures on the Assyrian Language and Syllabary*, by explaining the reasons for the usage, or giving the history of its genesis and growth, enable us to read with greater ease these wondrous records of the past, cotemporary with the most interesting portions of Old Testament history, and most strikingly corroborative of their truth. The light they throw on the much-vexed question of the date of the original institution of the Sabbath, and many other Biblical subjects, amply repays the labor of deciphering their meaning.[2]

It has been said that part of the inscriptions are Accadian, and part Assyr-

[1] The cuneiform type used in these pages is from the celebrated firm of Harrison & Sons, 45 St. Martin's Lane, London, W. C., who furnished the type used in the late George Smith's *Histories of Assur-bani-pal and Sennacherib*, and also in the *Syllabary* of Prof. A. H. Sayce.

[2] See *Catholic Presbyterian*, Vol. III, pp. 37–45, and Rev. W. DeL. Love in *Bibliotheca Sacra*, 1879, pp 744–46.

ian. There are also Persian, and other varieties; but the Assyrian belongs to the same family of languages as the Hebrew, Arabic, and Syriac, and it may be interesting to trace the family likeness in a few particulars. We may see it in the resemblance of common words, bearing decided testimony to the affinity of the languages, as in the following list, which is put in English letters as the only way to put the comparison within reach of the mass of intelligent readers:

English.	*Assyrian.*	*Hebrew.*	*Arabic.*	*Syriac.*
Spirit	Roohhoo	Rooakh	Rooh	Rookha
God	Ilu	El, Elohim	Allah	Alaha
Heaven	Samu	Shemaim	Semaa	Shemaya
Earth	Irtsitu	Arets	Ardh	Araa
Water	Mie	Maim	Ma	Maya
Man	Nis	Ish, Enosh	Insan Pl. nas	Nasha
Father	Abu	Ab	Abu	Aba
Mother	Ummu	Aem	Im	Aema
Brother	Akhu	Akh	Akh	Akha
House	Bitu	Beth	Beit	Beitha
Door	Bab	Baba (of the eye)	Bab	Babtha (of the eye)
Son	Pal, Ablu	Ben	Ibn	Bar
Daughter	Bintu	Bath	Bint	Bartha
Body	Pagaru	Phejer	Phejer	Pagra
Soul, Life	Napistu	Nephesh	Nephes	Naphsha
Forest	Kharsanu	Khoresh	Khursh	
Way	Darragu	Derrek	Tarik	
Sun	Samas	Shemesh	Shems	Shemsha
Star	Kakabu	Kokab	Koukab	Kaukba
Day	Immu, Yomu	Yom	Youm	Youma
Light	Noor	Ōr	Noor	Noora
Right	Imna	Yamin	Yemin	Yamina
Left	Sumela	Semohl	Shemal	Semala
Heart	Libbu	Læb	Libb	Libba
Head	Risu	Rosh	Ras	Risha
Tongue	Lisanu	Lishon	Lesan	Leshana
Eye	Enu	Ayin	Ain	Aina
Ear	Uzun	Ozen	Idhin	Adna
Mouth	Pi	Peh	Fum	Puma
Face	Panu	Paneh		
Silver	Kasap	Kesef		Kæsfa
Iron	Parzil	Barzel		Parzla
King	Malku	Melek	Melek	Malka
Throne	Kuzzu	Kissae	Kurseh	Kursya
Horse	Susu	Sus		Susya
Dog	Kilbelu	Keleb	Keleb	Kalba
Sheep	Tsæni	Tsohn	Dhahn	
Heifer	Agalu	E'jlah	I'jlat	Ae'galtha
Shade	Tsulul	Tsæl	Tsul	Tælala
River	Nar	Nahar	Nahr	Nahra
Fish	Nun			Nuna

The affinity of Assyrian with Shemitish languages is still more apparent in the use of particles, of which the following are examples:

English.	*Assyrian.*	*Hebrew.*	*Arabic.*	*Syriac.*
No, Not	La	Lo	La	La
Without	Balu	B'lo	Bila	Bila
And	U, Va	Va	Va	Va
As	Ki	K'	Ka	Aik
Like	Kima	K'mo	Kima	Akma
Before	Pani, Lapani	Lifnae		
With	Maa	Aam	Maa	Aam
Whether	Lu	Lu	Lou	Lau
Upon	Illu	A'l	A'la	A'l

In many of its grammatical forms the Assyrian language vindicates its Shemitish affinity. Thus, nouns have the absolute and the construct state. The designation of cases corresponds to the Arabic. In that language the nominative is Madhmûm, *i. e.*, marked by the vowel "u." The genitive is Maksûr, or marked by the vowel "e," and the accusative is Maftûh, or denoted by the vowel "a," and it is precisely so in Assyrian.

The Assyrian verb, in its forms, closely resembles the other languages of the same family. The names of its principal conjugations are the same. Its moods are similar, and its tenses almost identical in forms and in the number of persons. Any one familiar with Arabic, Syriac, or Hebrew will have no difficulty in conjugating an Assyrian verb. The likeness extends even to the kind of verbs. There is the same distinction between complete and defective verbs. There are, also, gutturals in the first, second, and third radical. The difference in its forms is just enough to suggest new ideas of the philosophy of language, and give a better knowledge of the growth of existing forms.

This family affinity of the Assyrian appears also in the meaning of verbs, as may be readily seen by a few examples:

Assyrian.	*Hebrew.*	*Arabic.*	*Syriac.*	*English.*
Bakharu	Bakhar		Bakhar	To prove in order to choose.
Banu	Bana	Bana	Bana	To build.
Ebiru	Aabar	Aabr	Aabar	To cross over.
Ezibu	Aazab	Aaz'b		To leave, Forsake.
Karabu	Karab	Karab	Kareb	To approach.
Khalaqu	Khalak	Khalak		To destroy.
Lamadu	Lamad		Lamed	To learn.
Maatu	Muth	Mat	Meet	To die.
Malaku	Malak	Malak	Malak	To consult, Reign.
Malu	Mala	Mala	Mala	To fill.
Naparaku	Farak	Farak	Farek	To break.
Pakadu	Fakad	Fakad	Fakad	To set over, Appoint, Visit.
Patakhu	Patakh	Fatakh	Fatakh	To open.
Sadharu	Sadar		Shatar (a writing)	To write, To put in a row.
Sakaru	Shakar	Sakar	Shakar	To drink to excess.
Salalu	Shalal	Sall	Shalel	To carry off, To plunder.
Saalu, Sahalu	Shaal	Saal	Shael	To ask.
Salamu	Shalam		Shalam	To complete.
Samea	Shamaa	Samaa	Shamaa	To hear.
Satuu	Shatah		Eshti	To drink.
Tsabatu	Tsabat	Dhabat		To seize.
Zacaru	Zacar	Dhacar	Dakar	To remember.

IX.

PHILOLOGY.

This chapter was originally written by Prof. W. S. Tyler, of Amherst College, in 1869. As the paper was too long for insertion in the present volume, it was condensed by another ten years later. If, then, the subject is not brought up to the present standard of philological science, the blame must not be laid at the door of the original author, who did his part well at the time when it was done. T. L.

Robert Boyle, the founder of the Royal Society of London, laid it down as the especial object of that institution, to propagate Christianity along with and through literature and science; and he has the honor of being, also, the founder of the first Protestant society for the propagation of the Gospel. He instituted the Boyle lectures for the defense of Christianity, and had translations of the Bible made and published at his own expense.

Leibnitz, when invited by Frederick III to form the plan of a National Academy at Berlin, proposed that it embrace four departments: (1) Physics, including medicine; (2) Mathematics, mechanics, and astronomy; (3) The Language and History of Germany, and (4), to use his own words, "Oriental learning, particularly as it concerns the propagation of the Gospel among infidels." The king adopted the plan, made him president for life, and gave the academy the oversight of foreign missions, becoming himself their patron. He made it a prominent object of this national association for literature and science, that by institutions extending not only to adjoining Christian lands, but also to the remotest barbarians, a zeal for extending the Gospel of our Saviour, Jesus Christ, might gradually be extended over the whole earth. According to this "Leibnitz plan of missions," literature and science were to be an important means of extending the knowledge of the Gospel. He held that both learning and religion would thus be advanced, and Christian and heathen lands reap mutual benefit, since literature and science would aid the missionaries, who, in turn, would send home the knowledge of new facts from their distant fields.

The name of Leibnitz had great influence in introducing the same ideas into the academies at Halle and Wittenberg, Vienna and St. Petersburg. It is interesting thus to see religion and literature starting out together for the conquest of the world, and ever since we find them marching, shoulder to shoulder, from victory to victory. Between missions and philology the connection is obvious and intimate. In order to preach in a foreign language, missionaries

must study it; and, to be masters of it, they must continue the study while they live.

There is no way of studying the radical tendencies and abiding traits of a people like the study of their language; for that not only reflects the fleeting thoughts of individuals, but photographs the characteristics of the race, especially those forces that have most profoundly impressed them; and of these none is so all-controlling as religion. Nothing, then, so molds language as religion, and nothing so expresses the religion of a people as their language. As the fossils of a country record the forms of life that have existed in it, so does its language record every influence that in succession has entered into the character of the nation. It can make the generations that have spoken it pass before us, with their deepest feelings and controlling thoughts laid open to our view.

Max Müller, in the preface to his *Chips from a German Workshop*, shows how language continues to bear the impress of the earliest thoughts of man, defaced, it may be, yet still legible to the eye of the scholar; and the continuity in the growth of religion is even more striking. We find its roots as far back as we can trace the history of man. An intuition of God, a sense of dependence on him, a belief in his government of the world, discrimination between good and evil, and a hope of a better life, he counts as radical elements of all religions; a part of the original dowry of the soul, without which religion had been impossible. He quotes Augustine to the effect that "what is now called the Christian religion existed among the ancients from the beginning; but when Christ came, the previously existing true religion began to be called Christian." Another father remarked that "if there is any agreement between the doctrines of the Greeks and our own, it is well to know it; and to learn how they differ will confirm us in that which is better than theirs." Just as the most degraded jargons of barbarians contain the ruins of former greatness and beauty, so the most barbarous forms of faith and worship contain some sparks of the true light that can be rekindled by the Gospel.

This learned philologist may press these views to an extreme, yet the general idea is founded in both reason and Scripture; and if there is any foundation for such views of the relation of the science of language to the science of religion, both scholars and missionaries have a lesson to learn. If prophets foretold Christ as the desire of all nations, and apostles preached the true God as Him whom the heathen ignorantly worshiped, whom they were feeling after, if haply they might find him, then are we justified in finding unconscious prophecies of Christ in the literature of all ages, and missionaries should be quick to discern germs of truth in the darkest minds, and by means of them lead men to the knowledge of the only true God, and Jesus Christ, whom he hath sent. Thus the science of philology deserves the attention of Christian scholars.

The Bible suggests a connection between language and religion, in the account of the original confusion of a single language into many mutually unintelligible modes of speech, whether it was a sudden and miraculous change, or a picture of the more gradual divergence of dialects under natural causes; for it shows

that changes in language are connected with moral and religious causes, and sin, which separates man from God, also sunders him from his fellow. Even if the gift of tongues in connection with the apostolic church was only an outward sign of the wonder-working power of the Spirit, it is yet a significant expression of the fact that God has interposed to counteract that sundering power of sin, and reunite men to each other and to himself. Does it not symbolize the spirit of Christ, bringing men on opposite sides of the globe to believe the same truths, cherish the same feelings, and speak the same spiritual language — a union that may ultimately assimilate language as well as thought and feeling? In the Pentecostal gatherings of the latter days, may not men hear each other speak in a language which all can understand, the wonderful works of God? So, in the removal of linguistic barriers between man and man, may the prophecies be fulfilled that "Every valley shall be exalted, and every mountain and hill shall be made low," and "There shall be no more sea."

The relation of missions to philology is illustrated in the steps taken to secure a uniform mode of reducing spoken language to a written form. The first missionaries of the Board among our Indians, feeling the need of some uniform system in their different fields, consulted the eminent philologist, John Pickering, concerning the possibility of a common alphabet, and in 1820 he communicated to the American Academy of Arts and Sciences his *Essay on a Uniform Orthography for the Indian Languages of North America.* He would represent each elementary sound by a distinctive character. The system was approved by the academy and adopted by the missionaries, and, with the approval of the Board, was applied not only to the languages of our own aborigines, but also in the isles of the Pacific and in Africa.

In 1848 Rev. H. Venn, secretary of the Church Missionary Society, prepared *Rules for Reducing Unwritten Languages to Writing in Roman Characters.* These were approved by several English societies, and applied to several African languages. A more complete alphabet, however, was needed for general adoption, and Prof. R. Lepsius, of the Royal Academy at Berlin, prepared his *Standard Alphabet for Reducing Unwritten Languages and Foreign Graphic Systems to a Uniform Orthography in European Letters.* This was approved by a committee composed of Profs. Bopp, J. Grimm, Pertz, Gerhard, Buschmann, and J. Müller. The progress of missions, meanwhile, so increased interest in the subject that the Chevalier Bunsen called a meeting, at which were present, among others, Profs. Wilson, Müller, Owen, Dietrich; Sirs C. Trevelyan and J. Herschel; Rev. Mr. Stanley; Messrs. Norris, Pertz, Babbage, Wheatstone, and Cook; Rev. Messrs. Venn, Chapman, Koelle, and Graham, of the Church Missionary Society; Rev. Mr. Arthur, of the Wesleyan, and the Rev. Messrs. Underhill and Trestrait, of the Baptist, Missionary Societies. Prof. Lepsius was also present, and his alphabet was adopted by the meeting. Prof. Lepsius holds that the matter has both a scientific and practical end: the former to bring these languages more within our reach, and the latter to facilitate the propagation of the Christian faith among those heathen nations that have no written language. So Lepsius carried out the designs of Leibnitz in this twofold service to language and to missions. The alphabet at once was

approved by a number of missionary societies, including our own Board, and within five years had been applied to fourteen African and seven Asiatic languages, and has already done immense service both to philology and missions.

In the first stage of linguistic research, missionaries have rare facilities for gaining accurate knowledge. They learn both the written and spoken language, read learned books, and talk with the masses, and that, too, not for a visit, but through life. There can be no better authority on anything relating to a distant country or people than an observant, well-educated missionary.

The earliest contributions to the modern science of language were made mainly by Papal missionaries; and the beginnings of comparative philology rose from a comparison of translations of the Lord's Prayer in the fifteenth century. In 1784 Hervas published his polyglot vocabulary in one hundred and fifty languages, and the Lord's Prayer in more than three hundred.

When not only single words were compared, but also the grammatical structure of languages, as in the *Mithridates* of Adelung and Vater, the grammars and lexicons prepared by missionaries still furnished no small part of the materials for comparison; and as there is now scarce a nation on the face of the whole earth where missionaries have not been sent, scarcely a language which missionaries have not used, we see how abundant the materials are. And as philology can be perfected only by collecting and collating all the facts, in order to discover the laws that govern all languages, missionaries must be not only pioneers, but laborers to the end.

We need only to look at the number of the missionaries of our own Board, their distribution over the earth, and the nature of their work, to see their facilities for collecting materials for the science of language. In 1879 it had sixteen missions, occupying seventy-five stations and five hundred and ninety-eight out-stations; fifteen hundred and sixty-four laborers in all, including three hundred and ninety-four from this country; two hundred and sixty-one churches, with fourteen thousand six hundred and seventy-five members; twenty-three training and theological schools, with seven hundred and twenty-five pupils; twelve hundred and two girls in boarding schools; and six hundred and twenty-six free schools, with twenty-six thousand seven hundred and thirty-seven pupils. These missions are in the four quarters of the earth: in many provinces of India and China; in Turkey and southern Africa; among our own Indians; and on the isles of the Pacific. The languages used belong to the three great classes of the uninflected, inflected, and agglutinated; and the peoples using them belong to the principal races of mankind. Our missionaries have been, and are, among the best masters of the Chinese language, the Tamil and Marathi, the modern Syriac and Kûrdish, the Turkish, Armenian, and Bulgarian, also the Arabic, which is understood by intelligent Moslems from China to Liberia; the modern Greek; the Zulu Kaffir, of South Africa, and the Grebo, Mpongwe, and other languages of the western coast; the Cherokee, Choctaw, Dakota, and Ojibwa, of our North American tribes; besides the Hawaiian and other languages of the Pacific. Books or tracts have been printed by the Board in forty-six languages. Besides those just mentioned, and the English, we name the Hebrew, Spanish, ancient Syriac, Gujerati,

Sanskrit, Hindostanee, Portuguese, Persian, Telugu, Siamese, Malay, Bugis, Dyak, Japanese, Marquesas, Micronesian, Dikĕlĕ, Creek, Osage, Ottawa, Seneca, Abenaquis, Pawnee, and three in Oregon. Twenty of these languages were spoken by missionaries, at the house of Dr. Anderson, on the evening after the fiftieth anniversary of the Board, and more than twenty have been reduced to writing by our own missionaries; among them the Grebo, Mpongwe, Dikĕlĕ, Zulu Kaffir, modern Syriac, Dyak, Hawaiian, several in Micronesia, the Cherokee, Choctaw, Creek, Osage, Ottawa, Ojibwa, Abenaquis, Dakota, Pawnee, and three languages in Oregon. The Roman character is used in all these except the Syriac and Cherokee. Grammars have been prepared and published of modern Greek, Armenian, Arabic, ancient and modern Syriac, Hebrew, Tamil, Chinese, Hawaiian, Grebo, Mpongwe, Zulu, and Dakota; and dictionaries of the Armenian, Hebrew, Tamil, Chinese, Hawaiian, Grebo, Mpongwe, Zulu, and Dakota. One has also been prepared of modern Syriac, containing ten thousand words.

No one can read the contents of the *Journals* of the American Oriental Society and not be struck with the number of articles furnished by missionaries of the Board. In every volume are mentioned from four to twenty donations of books from missionaries, mostly in foreign languages. Of the five hundred and ninety-one pages of the first volume, one hundred and fifty-three are filled by five missionaries; in the second volume, eight occupy one hundred and thirty-four of its three hundred and forty-two pages; nine fill one hundred and fifty-seven out of five hundred and three pages in the third; eight claim one hundred and ninety-eight pages out of four hundred and eighty in the fourth; thirteen take up two hundred and one of the four hundred and forty-four pages in the fifth, and four occupy three hundred and seventy-two out of five hundred and seventy-six pages in the sixth — considerably more than one third of the whole, chiefly on subjects connected with philology.

The Hawaiian language has five vowels, a e i o u, having the Italian sounds, and seven consonants, h k l m n p w. Every syllable ends with a vowel. To express foreign, especially Bible names, nine consonants were added. This simple alphabet soon made the ability to read almost universal. The language is further modified by tones or accents, varying the meaning of words composed of the same letters. A majority of words can be used either as nouns, adjectives, verbs, or adverbs, not by changing their form so much as their place in the sentence and their adjuncts. As in all uncultivated languages, there is a great lack of generic terms, but the language is rich in specific epithets. The Hawaiian dictionary by Rev. L. Andrews (1865, 8vo, 559 pp.) defines fifteen thousand five hundred words — as many as the first edition of Dr. Johnson's English dictionary. The Hawaiian grammar by the same author (1854, 8vo, 156 pp.) shows the peculiarities of Hawaiian orthography, ethymology, syntax, and prosody in a systematic manner, worthy of any ancient or modern language.

Prof. Whitney says of the Malay Polynesian, or oceanic family of languages: "A few nearest to further India have alphabets and a scanty literature, coming chiefly through the introduction of religion and culture from India. The

Malay has adopted the Arabic alphabet. For islands so scattered, these languages have a noteworthy correspondence of material and structure. Their family coherence is unquestionable, but the degrees of relationship among its members are only partially made out as yet. Missionaries act an important part in laying them open to knowledge, as well as in diffusing knowledge through them." The Hawaiian Missionary Society, daughter of the American Board, already has missions in the Marquesas, Marshall, and Gilbert Islands, and the "Morning Star" is running to and fro among these groups, one thousand miles from each other, conveying to them the knowledge of Christ, and bringing back to us knowledge of geography, language, and whatever pertains to man. In these islands are different dialects of the same language, not to call them different languages, in which different versions of the Bible, while imparting to the natives the true wisdom, furnish us with data for a better knowledge of philology.

[Rev. S. Dibble, in his *History of the Sandwich Islands*, pp. 5–7, gives the Lord's Prayer in Tahitian, Rarotongan, Hawaiian, Marquesan, Samoan, and the New Zealand and Tonga languages, from an article by Rev. Mr. Davies, one of the oldest missionaries in the Pacific, in the second volume of the *Hawaiian Spectator*. He also gives a list of words from the Malay and Polynesian languages, showing their affinities and resemblances; also the ten numerals in Tahitian, modern Tahitian, Marquesan, Rapan, Rarotongan, Hawaiian, Paumotuan, Samoan, Fijian, Malayan, Javanese, and in the languages of New Zealand, Easter Island, Tonga, Tana Island, Islands of Savu, Ceram, Isle of Mosses, Islands of Sampoor, Cocos, New Guinea, Madagascar, New Caledonia, Caroline and Pelew Islands, Mindanao, the Tagals and Battas, and the language of Acheen, in Sumatra, pp. 8–11. — T. L.]

The languages of North and South America belong to one family, though, owing to a great variety of climate and a roving manner of life, dialectic differences have become extreme. Indeed, they are still undergoing great and rapid changes. In more than one of them, books prepared by missionaries have become almost unintelligible in three or four generations; yet all are probably derived from one parent language, for, from the Arctic ocean to Cape Horn, the construction of all of them is polysynthetic, tending to abnormal agglomeration of elements in their words. Names thus are cumbrous compounds, and the languages tediously polysyllabic; *e.g.*, in the Mexican, the word for goat signifies "head tree (horn) lip hair (beard)," or "the horned and bearded one." In Delaware and Araucanian, the sentence "I do not wish to eat with him" is one word; and in Cherokee, the word-phrase "Wi ni taw ti qe gi na li skaw lung ta naw ne li ti se sti" means "They will by that time have nearly finished granting favors at a distance to me and thee."[1] Thirteen of the languages reduced to writing by our missionaries represent five groups of Indians: the Florida group, Iroquois, Algonquin, Dakota, and Oregon.

The Cherokee alphabet deserves a passing notice. A Cherokee named Guess, or Sequoyeh, who knew only his native tongue, conceived the idea that he could represent all its syllables by separate characters. They numbered

[1] Whitney's *Language and Study of Language*, Lect. IX.

eighty-two; and to express them he took our letters and various modifications of them, and, adding to these some marks of his own invention, made out the requisite number of characters, and soon was able to correspond, by means of them, with other Indians who had learned no other alphabet. Four other signs were subsequently added, making eighty-six in all. A Cherokee has only to learn this alphabet, which he can do very readily, and he is able to read at once. Events which have affected the destiny of the Cherokees have hindered the success of this alphabet, yet it remains a rare achievement of native genius. Every syllable in Cherokee ends with a vowel, unlike other North American dialects, though this peculiarity, I believe, prevails in nearly all of them. Hence the number of syllables in them would not admit of such an alphabet without becoming very cumbrous, like the cuneiform. Even in the Hawaiian, ninety-five syllabic characters would be required, whereas the present alphabet, as we have seen, requires only twelve letters.

The grammar and dictionary of the Dakota language, by Dr. Stephen R. Riggs, fills Volume IV of *The Smithsonian Contributions to Knowledge.* It contains more than sixteen thousand words, and fills three hundred and thirty-eight pages, quarto. The grammar fills sixty-four pages, quarto. The alphabet has five vowels and twenty-four consonants. Syllables, with few exceptions, end in a pure or nasalized vowel. Three fourths of the words with two or more syllables accent the second syllable, and most of the remaining words accent the first. Personal pronouns have a dual number, as well as singular and plural; and nominative, possessive, and objective cases. They make no distinction in gender. Nouns have only two numbers, and no possessive case. Gender in them is denoted by termination or by different words; most frequently by adjectives denoting sex. Verbs have three persons, the third being the simple form, and the others formed by the addition of the personal pronouns. In this, and in having three numbers, the verb resembles the Hebrew. It has three modes: indicative, imperative, and infinitive; and only two tenses: an aorist and a future, which is also like the Hebrew; but the variations in form and meaning of some of the verbs are very numerous. Adjectives have three numbers, and are compared only by means of adverbs. Prepositions follow the nouns they govern, like the Turkish, and are often incorporated as prefixes, suffixes, or insertions, with nouns, verbs, and adverbs.

The verb follows both its subject and object, the last coming between the subject and the verb. Its arrangement of sentences is very primitive. "Give me bread" becomes "Bread me give." So the best interpreters begin where the speaker leaves off, and go backwards. The same is true in translating Scripture sentences. Our North American languages furnish a problem by no means easy of solution, but missionaries have contributed important data towards it.

Missionaries of the Board have reduced four African languages to writing; published grammars and dictionaries in them, the Bible in whole or in part, and also other books of instruction. They have also written articles of great philological value for periodicals at home. The first volume of the *Journal of the American Oriental Society* contains three such contributions.

The *Bibliotheca Sacra* for November, 1847, contains "a comparison between the Mandingo, Grebo, and Mpongwe dialects," by Rev. J. L. Wilson. The editor says of this article: "It communicates a variety of facts about the languages of western Africa deeply interesting alike to the Christian and the philanthropist. The phenomena adduced are a striking confirmation of the scientific value of Christian missions. Though an indirect and undesigned effect, it amply repays all the cost incurred. The missionary thus coöperates with the scholars and philanthropists of Christendom in extending the boundaries of knowledge and civilization."

Mr. Wilson arrives at the general conclusion that, in the northern half of Africa, the number of languages is very great, with little if any affinity for each other; while south of this one great family prevails, down to the Cape of Good Hope. The languages of the north and south show that these two families of blacks, whatever physical resemblances they possess, must have had different origins.

Selecting the Grebo and Mandingo from the languages of the north, and the Mpongwe from those of the south, he shows radical differences between them and a marked correspondence between the character of the people and their languages; *e. g.*, the Grebo language, like the people, is harsh, abrupt, energetic. It is also indistinct in enunciation, meager in words, abounding in nasals and gutturals, has but few grammatical inflections, and is very difficult to acquire. The Mpongwe, reflecting the character of that people, is soft and flexible, distinct in enunciation, methodical in grammatical forms, almost free from nasals and gutturals, and very easy of acquisition. Grebo is in great measure monosyllabic. Mandingo has only about one fifth of its words so short, and almost all nouns have two or more syllables. In Mpongwe are not over a dozen monosyllabic nouns, and only two or three monosyllabic verbs. Grebo has few or no contractions, but the other two languages abound in them, making one word out of three or four. The Mandingo for "sister" is literally "my mother's female child." Still, the contractions are not so numerous as in some of our own Indian languages. The alphabet of Mr. Pickering is used in writing all these languages, but expresses the two others more adequately than the Grebo. There are no inflections in any of them to distinguish gender or case in nouns. Gender is denoted by uniting with the noun the word for man or woman. Subject and object, having the same form, are only distinguished by position, as in English. The possessive is formed in Grebo by inserting "it," and in the other languages "his," between the possessor and the thing possessed; *e. g.*, "The child *it* of John," and "John *his* child." These three languages have few adjectives. The deficiency is made up by the use of a noun and verb. Thus, for "He is hungry," they say "Hunger works him." They have no degrees of comparison; yet they are rich in pronominal forms, not to express gender or case, but importance, insignificance, emphasis, and the like. Verbs have no distinguishing form of gender or number. In Grebo they have three modes and thirteen tenses. The passive voice is never used when it can be avoided. This seems to be true of all the languages of northern African negroes. Mpongwe verbs have

four modes and four tenses; they always end in "a," are very regular, and rich in causative, frequentative, and similar forms, denoting the varied relations of actions. Regular verbs have five simple and six compound conjugations, thus: *Mikamba, I talk; Kambaga, to talk constantly; Kambiza, to cause to talk; Kambina, to talk with some one; Kambagamba, to talk at random;* and by combining these we have: *Kambazaga, to cause to talk constantly; Kambinaga, to talk constantly with some one; Kambinaza, to cause to talk with some one; Kambagambaga, to talk at random constantly; Kambagambiza, to cause some one to talk at random; Kambagambina, to talk with some one at random.*

There is no word common to any two of these languages except the letter "m," a contracted form of the pronoun "I" in Mpongwe and Mandingo, and "ne," meaning "is" in Grebo and Mpongwe; though there are some general resemblances in grammatical forms.

About the time that Lepsius devised his standard alphabet, our missionaries at Natal, on account of the close affinity of some languages in that vicinity, desired a uniform mode of reducing them to writing, and took some steps to secure it, but, on learning of his more comprehensive plan, adopted that. Among those most active in this were Rev. J. C. Bryant and Rev. L. Grout. The former soon died; but Mr. Grout, in 1859, wrote a grammar of the Zulu language, which, for fullness and accuracy, will bear comparison with any of the standard grammars of ancient or modern languages. The title-page is suggestive. It speaks of Mr. Grout as both a missionary and corresponding member of the American Oriental Society, and is published both in South Africa and London. All South African languages except the Bechuana and the Hottentot have many of the characteristics just mentioned in the Mpongwe. The Zulu alphabet has thirty-two letters, twenty-two of them the same in form with the English, though not all having the same power. Five are vowels, twenty-four consonants, and three clicks, which are sounds peculiar to South Africa. The accent is generally on the penultimate. All nouns consist of a root and a prefix or incipient. This last is also peculiar to South Africa. There are eight declensions, distinguished by different incipients and different ways of forming the plural. Gender rarely affects declension. There are three cases, distinguished by inflection. Among these is a locative case, denoting the place at or in which a thing is or is done, or whence or whither it proceeds. There are few adjectives in Zulu, the deficiency being made up, as in West Africa, by the use of nouns and verbs. They are inflected by prefixes which conform to the incipients of the nouns with which they agree in class and number.

For numerals, the Zulus use the decimal system, suggested by the ten fingers; and count by pointing out the things counted with their fingers, beginning with the little finger of the left hand, and ending a decade with the same finger of the right hand. The names of the numbers indicate this; thus, five signifies "finish the hand;" six, "take the thumb;" seven, "point with the forefinger;" eight, "leave two numbers," and so on.

Pronouns are an index to the nouns for which they stand, by a marked resemblance to the nominal incipient, the radical part of the pronoun being

often a mere image of that. Personal pronouns have different forms for numbers, but not for gender or case.

The verbs resemble in form the Mpongwe. They are mostly regular; the root always begins with a consonant, has two or more syllables, and ends in "a." Their chief characteristic is the number, variety, and yet perfect regularity of the conjugations, expressing relative, causative, reflective, reciprocal, and other significations, as in the Mpongwe.

Mr. Grout thinks, with Mr. Wilson, that, with the exception of the Hottentots and Bushmen, South Africans form glottologically but one family, and have all come from the north, crowding and crowded to the south. The clicks, the conjugations, and the incipients are marked indications of their affinity.

In a paper read before the American Oriental Society, but not published, Mr. Grout expresses the conviction that there is a genetic connection between the Copts and the Hottentots, a portion of the former people having been detached from the rest and driven gradually south to the position now occupied by the latter.[1]

Our knowledge of African languages remains nearly where the missionaries leave it. [Mr. Stanley gives a tabular comparison of one hundred and ten of the most common words in fifty-four African languages, in the appendix to his *Through the Dark Continent*, but for some of these he is indebted to missionaries. Twenty-four of the fifty-four were collected by himself in the course of his various wanderings in that land.—T. L.]

Prof. Whitney says:[2] "The extraordinary activity of missions and geographical discovery in Africa within a few years has directed study toward African dialects. A great mass of material has been collected, and examined sufficiently to give a general idea of the distribution of races in that continent, but a vast deal still remains to be done."

To those accustomed to hear only one language, the Turkish empire, also, seems like one great Babel of barbarous tongues. The missionary there needs to be a living polyglot; and some have spoken several languages with the fluency and propriety of natives. Dr. E. Riggs began his work by translating the Bible into modern Greek, continued it by a version in the Armenian, and now has added to that the Bible in the modern Bulgarian. The unifying influence of this last is already manifest in the language, which had not only widely departed from the old Slavic, but had divided into two dialects. This translation, however, in which Dr. Riggs was aided by Dr. Long, of the Methodist mission north of the Balkans, strikes the balance so happily between the dialects, and meets with such a hearty welcome, that it is becoming the fixed standard of a common language.

A thousand years have elapsed since the Bible was translated into the old Slavonic, also called the Church Slavic, because adopted by a large part of that race as their sacred language; and it is a curious coincidence, pointed out by Prof. Whitney, "that our knowledge of Germanic and Slavonic speech begins,

[1] *Proceedings of American Oriental Society*, Vol. VII, p. lvii.
[2] *Language and the Study of Language*, Lect. IX.

like that of many a dialect to-day, through a version of the Bible made by the missionaries," Cyril and Methodius.

In 1859 and 1860, Rev. C. F. Morse published a grammar and vocabulary of the modern Bulgarian, in which he was aided by Bulgarian scholars. The so-called Cyrillic alphabet consists of thirty-four letters. The ancient one had forty-one.

Bulgarian nouns have three genders; names of inanimate objects are sometimes masculine or feminine, and names of persons sometimes neuter. The dual of the old Slavic has become obsolete. Only the nominative, accusative, and vocative cases are in common use. The dative is used occasionally, and there are traces of the old genitive. The instrumental and prepositive cases are yet more rare. The adjective, like the noun, is varied to express gender, number, and case, though it has also lost many of the ancient inflections. It is always compared by prefixing the words more and most. The dative is in constant use in personal pronouns. The only moods marked by distinct forms are the indicative and imperative. There are seven tenses, three of them having two forms. Most verbs have two or three conjugations, to express single, repeated, or conditional action. Their number and regularity constitute a peculiarity resembling the African languages. As in English, the infinitive is marked by the preposition "to." The noun follows the adjective, and the subject precedes the verb.

Dr. Riggs sent to the Oriental Society, in 1862, translations of Bulgarian songs, from a collection of more than six hundred, taken from the mouths of the common people. Among various meters, the most common one resembles Longfellow's "Hiawatha."[1]

Dr. Jonas King's greatest philological service, perhaps, arose from his influence in promoting the introduction of the modern Greek Scriptures into the schools of Greece, and securing their extensive circulation among the people. To say nothing of the spiritual blessing thus conferred on the nation, or the service rendered to good government, he, in this way, did much to restore the modern language to the purity and beauty of the ancient, and fix it permanently for the future; for the history of the English and German Bibles shows that nothing so much elevates and settles the language of a people as a good version of the Bible.

Though the Armenian language is very old, its literature also begins with the introduction of Christianity in the fifth century. The alphabet was then invented by St. Mesrob, who was one of the translators of the Bible into that language. Ancient Armenian is not now understood by the people. Dr. Riggs is the author of the first grammar of the modern Armenian. The alphabet has thirty-eight letters. Its syntax resembles the Turkish, and differs both from ancient Armenian and European languages. In the order of a sentence the circumstances of place and time are mentioned first; then the subject, preceded by its adjective, if it has one; then the object of the action, followed by the manner or instrument; and, last of all, the verb. Though the language belongs

[1] *Journal of American Oriental Society*, Vol. VII, p. lviii.

to the Indo-European family, Dr. Riggs finds in it roots common to it with the Hebrew as well as with Latin and Greek.

As the Armenians are scattered over Persia and India, as well as Turkey, their spoken language differs widely; but the translation of the Scriptures into modern Armenian, the preparation of the grammar of the language, and the religious literature created in it, have formed a common standard which is working powerfully to settle the language, as well as enrich it with spiritual truth.

Scattered among the mountains of Kûrdistan, and clustering along the western shores of the lake of Oroomiah, are the Nestorians, whose early missions extended to China, and whose churches one thousand years ago, like a chain of outposts, connected that empire with western Asia. Their language is a modern dialect of the Syriac, cognate with the Hebrew, and more nearly related to the "Syro-Chaldaic" spoken by our Lord. [A Nestorian, if he wished to expostulate with his friend for leaving him, would say: "Lima sabachthani" (Matt. xxvii: 46); and a Nestorian mother, if she wanted her daughter to rise up, would still say, "Koomi" (Mark v: 41), though to her son she would say "Koom," "i" being the feminine termination of the second person singular of the verb. So, in the mountains, Chaepa (Cephas) is a stone, and Simon Peter is Shimon Chaepa, pronounced Tshaepa. T. L.] Modern Syriac differs from the ancient more than the Greek of the present day from that of Plato, and less than Italian and French from Latin. Dr. J. Perkins was the first to reduce it to writing, in 1836. As he taught his first class to read the Lord's Prayer, he understood why Dr. Chalmers pronounced the Indian boy in the woods, learning to read, the sublimest object in the world; and when he laid the first printed proof of the Bible before his assistants, they exclaimed, "It is time to give glory to God." He translated the entire Bible, and printed it in parallel columns with the ancient Syriac.[1] His contributions to American periodicals and his work on Persia are noticed elsewhere.

The first attempt at a grammar of the modern Syriac was a brief but excellent sketch by Rev. A. L. Holladay. The grammar of Rev. D. T. Stoddard is written with constant reference to the Hebrew and ancient Syriac, and so far forth is a comparative grammar. He found the roots of verbs identical with those of ancient Syriac, but the inflections and scheme of conjugations different. Like other modern languages, it has broken up the original form of the verb, and uses new auxiliaries both in the active and passive voice.

The first mission of the American Board was to the Marathi people in India, and the first station was Bombay. Rev. E. Burgess wrote a grammar of the language, which is closely related to the Sanskrit, using the same alphabet, consisting of fifty letters, sixteen of them classed as vowels, and thirty-six consonants.[2] Roman letters are also employed in the method recommended by Sir W. Jones. This grammar has the merit of originality and simplicity. It does not follow all the intricacies of Sanskrit treatises on grammar. Instead of their eight cases, it makes three according to meaning, and only two according to form.

[1] Peshito.

[2] Two of them seem to do service in both capacities.

Our Tamil mission has not only translated the Scriptures into that language, and furnished to the people a Christian literature containing more than three hundred works, but has collected ample material for the study and classification of the language. It belongs to the Dravidian group, which includes, also, the Malabar, Canarese, and Telugu, and to the Turanian, or Scythian family. The people speaking these languages have been driven to the southern part of Hindostan by the superior race of the Hindoos, and have adopted their religion and literature. Rev. H. R. Hoisington, in his "Brief Notes on the Tamil Language,"[1] argues for the Shemitic affinity of the language and people. Rev. E. Webb[2] accepts the evidences of their Scythian affinity. Prof. Whitney inclines to the same view, but waits further evidence.

[1] *Journal of American Oriental Society*, Vol. III. pp. 387–398.

[2] Do., Vol. VII, pp. xliv, xlv.

X.

ETHNOGRAPHY.

Closely connected with the contributions of missionaries to philology are their contributions to the related science of ethnography. Indeed, the same facts furnish material for both these sciences. Ethnography is "that branch of knowledge which has for its object the description of the different races of men, with their different characteristics, circumstances, manners, and habits." Ethnology is "the science which treats of the division of man into races: their origin and relations, and the differences which characterize them." Anthropology is "the science of man, considered in his entire nature, as composed of body and soul, and as subject to various modifications from sex, temperament, race, civilization, and the like." "Ethnography embraces the descriptive details, and ethnology the rational exposition." Both sustain the relation to anthropology that parts do to a whole. They run into each other, "their differences being mainly those between the particular and the general; between the orderly collection of local facts and the principles according to which they are grouped and interpreted. Ethnographists deal with particular tribes, and the particular institutions and customs prevailing among them. Ethnologists bring simultaneously under review superstitions, legends, customs, and institutions which, though scattered in distant regions of the earth, have some common basis or significance." The science of ethnology does not date back of the present generation. The word ethnography occurs perhaps for the first time in the *Atlas* of Balbi (1826).[1]

As the science is so new, it is not strange if the enemies of religion seek to pervert it to their purposes. It is always so. The "god of this world" tried thus to make the sciences of astronomy and geology subservient to his kingdom; and if the effort was made to preëmpt the science of the heavens and the earth for the service of irreligion, it is nothing strange if the science of the races inhabiting the earth meet with the like treatment. The intelligent Christian is not, on that account, an opposer of the science, but, knowing that the God of the Bible "made the world and all things therein, and hath made of one blood all nations of men to dwell on all the face of the earth," he does all in his power to help it on, knowing that in his own time the Lord will take possession of it for himself, and that unscientific theories, formed on the basis of

[1] Elie Reclus, in *Encyclopædia Britannica*, ninth edition.

a too hasty and one-sided induction of facts, will soon give place to a more comprehensive induction, that shall bring this science also into line with all others, in their harmony with the written word.

The distinction just made between ethnography and ethnology shows us where to expect to find the toiling hands of our missionaries — not among those at the center, who have time to build up the structure of ethnology, but among the careful observers of the facts of ethnography, who furnish the materials for that structure. In this incipient stage of the science, too, their help may be more efficient in collecting the simple facts than in deducing from them general truths, which may require to be modified by other facts, collected from other quarters, before they become of universal application.

It is also to be expected that these facts, however valuable when they come to be seen in position in the finished structure, may not show to equally good advantage when viewed separately and apart; just as the large blocks of stone lying scattered round the site of the intended building do not appear so well as when each occupies the place assigned it by the architect.

The contributions of missionaries to comparative philology furnish important help for the classifications of ethnology. The study of Sanskrit — and our missionaries stand high among those who are acquainted with that ancient language — has taught Germans and Scandinavians to trace back their genealogy till its separate stems unite in India, and the variation of words in each language determines the era when those who use it left their ancient home.

In the hand of modern scholars, philology has become a telescope, by which we penetrate the secrets of the distant past. It discovers bonds of parentage between those who, like the Greeks and Persians, reproached each other as barbarians, and detects a diversity of origin between others, who, like the Greeks and Egyptians, thought themselves closely allied. The old Aryan vocabulary reveals that race as ploughing with oxen, using carriages and boats, and keeping cattle. As it does not mention the ass and cat, it shows they had no dealings with the Egyptians. As it speaks of bears and wolves, but not of lions and tigers, the people that used it must have lived north of Assyria, where lions hunted and were hunted, and did not extend to the southern shores of the Caspian, where tigers still seek their prey.

Our missionaries in the Pacific distinguish the natures of different groups not only by their peculiarities of body, but by the relations of their languages to other known languages of Asia and the speech of other islands; and this knowledge will be more accurate and thorough as the power to compare these languages and detect their deepest contrasts and resemblances increases.

It is already ascertained that the Hawaiians form one of the families of the brown Polynesian race — radically distinct from the Malay, and more akin to the Papuan — which inhabits, also, the Marquesas, Tonga, Society, Friendly, and Samoan groups, as well as New Zealand. Their similarity of language is so great that the Hawaiian and the New Zealander, though living five thousand miles apart, readily understand each other. They are of a swarthy complexion, inclining to olive, with hair black, glossy, and wavy. They have large eyes, a broad nose, and full lips. They are well-knit and active. Their stature is

good, but their chiefs are larger and taller than Europeans. They are expert in swimming, make good fishermen and sailors, and are of a yielding and imitative disposition, laughter-loving, and capable of a fair degree of elevation.

The population of the islands is steadily decreasing. In 1822 it was estimated at one hundred and forty-two thousand; ten years later, the official census gave one hundred and thirty thousand three hundred and thirteen. In 1836 it was one hundred and eight thousand five hundred and seventy-nine; in 1850, eighty-four thousand one hundred and sixty-five; in 1860, sixty-nine thousand eight hundred; and in 1872, fifty-six thousand eight hundred and ninety-nine. This decrease is due to many causes — chiefly to diseases introduced by contact with the whites[1] and to intoxicating drinks; and, but for the missionary work, would have been much greater than it is — if, indeed, the race had not, ere this, like some others, been wholly extirpated.

A thorough collation of the vocabularies and grammars prepared by our missionaries among the North American Indians may throw light on their place among the nations, and on many an ancient migration now unknown or only guessed at through the mists of time. So the scholarly works in philology written and published by our missionaries in India may yet throw a flood of light on the origin and migrations and other changes of the one hundred and fifty millions in that peninsula.

Dr. D. O. Allen[2] speaks of the Sanskrit as a polished language, "of wonderful structure, more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either."[3] H. H. Wilson, Oxford Professor of Sanskrit, says: "The music of its composition must ever be inadequately expressed by any other tongue." It has not been spoken for centuries, but at an early period was vernacular in the valley of the Ganges, and probably came from the northwest. Dr. Allen thinks it was not the parent of the vernacular languages of India, but that they were the languages of the aborigines, previous to the introduction of the Brahminic system; and that, as the Sanskrit was the repository of all the Brahminic learning, theological, scientific, and technical terms were transferred from that into the other languages. The Sanskrit, even at the early period when the Hindoo dramas were written, seems to have been confined to the higher classes; for, while the parts spoken by the learned are in that language, persons of low caste are represented as performing their parts in the vernacular.[4] He thinks the Tamil, Canarese, Telugu, Marathi, Oriya, Bengali, Hindui, Gujerati, Scindi, Punjaubi, and Hindostani are distinct from the Sanskrit and from each other, each representing its own aboriginal population;[5] nearly all of them have different alphabets. The Tamil is more polished and contains more literature than any of the rest. While the learned in other parts of India wrote in Sanskrit, the learned among the Tamil people used their own tongue.[6]

Besides determining the relations of different African tribes to each other through the affinities of their languages, Dr. J. L. Wilson has shown how the

[1] Dr. Anderson's *Hawaiian Islands*, pp. 269-278. T. M. Coan, M. D., in *American Encyclopædia*.
[2] *India, Ancient and Modern*, pp. 431-433.
[3] Quoted from Sir William Jones.
[4] *India, Ancient and Modern*, p. 434.
[5] Do., p. 435.
[6] Do., p. 436.

languages of Western Africa reveal the contact of tribes there with various European nations, by words borrowed from their languages. So the dialects of South Africa bear witness to the presence of the English and Dutch in that quarter, as those of the eastern coast indicate the vicinity of the Malagasy; while in the north, intercourse with the Arabs and Copts is detected through the traces of that intercourse left in the languages of that region.

Rev. L. Grout gives a very full account of the Zulus and their language. Taking language for his guide to the knowledge of their relations, he concludes with Dr. J. L. Wilson that all the aborigines of South Africa, save the Hottentots and Bushmen, had a common origin. This variety, extending north to equatorial Africa, includes the Zanguebar and Mozambique tribes; the Zulu and Kosa; the Bechuana, Bayeye, and kindred tribes in the interior; and the Ovaherero, Ovampo, Kongo, and Mpongwe on the west. Their moral and physical characteristics, mental type, and religious notions corroborate this view. They are known as the Zingian or Bantu race. The Hottentots seem to have been separated from their kindred in northern Africa, and crowded before the advance of this other race to the southern extremity of the continent. While other things point at this fact, the similarity between the Coptic and Hottentot languages gives the most reliable evidence of its truth. The Zingian race seems to be Hamitic; belonging to those called in the Hebrew Scriptures by the name of Kûsh. Its language is alliterative, or prefixional, called by some agglutinate, like the Turkish and Tatar.[1]

One peculiarity of the language is a curious smack in one out of a dozen words, called a click, which may be made with the tongue and front teeth, with the tongue and palate, or with the tongue and double teeth on either side. Another is, that the formative letters generally precede the root, thus: umfana, boy; abafana, boys; inkomo, cow; izinkomo, cows; ilizwi, word; amazwi, words. So in the adjective: umfana omkulu, large boy; abafana abakulu, large boys; inkomo enkulu, large cow; ilizwi elikulu, large word. So in the possessive pronouns: abafana bami, my boys; izinkomo zami, my cows; ilizwi lami, my word; showing an alliterative euphony. Mr. Grout illustrates this by other examples. No language has more regularity, flexibility, and precision. Nouns are of eight classes, according to their first syllable and the form of their plural. The plural of the first is made with aba, the second with ama, the third with izin, each class and number having its own form of the pronoun, personal, relative, or possessive, and so on. This may seem complicated, but it is so exact and regular that not even children are at a loss for the right form, or make mistakes. The language also avoids the softness arising from too many liquids, and the harshness caused by a superabundance of consonants.

Its greatest defect is the paucity of terms for moral and religious ideas. Yet the language is capable of development and enlargement. One root is capable of many modifications; thus, from *bona*, to see, comes *bonisa*, to cause to see, *bonisisa*, to cause to see clearly, *bonela*, to see for, *bonelela*, to see and do the same, to imitate, *bonana*, to see each other, *bonelana*, to see for each other, *bonisana*, to cause each other to see, *bonakala*, to be visible, *bonakalisa*, to make

[1] *Zulu-Land*, pp. 59-65.

visible, *umboni*, a seer, *umboneli*, a spectator, *umbonelo*, a spectacle, *umbonisi*, an overseer, *umboniso*, a show, *isibono*, a sight, a curiosity, *isiboniso*, a vision, *isibonakalo*, an appearance, *isibonakaliso*, a revelation; and so it might be traced through the passive voice also; as, *bonwa*, to be seen, *boniswa*, to cause to be seen, *bonisiswa*, to cause to be clearly seen, and so on.

Like the German, it forms compound words: *impuma langa*, east, from *puma*, to come forth, and *ilanga*, the sun; *inchona langa*, west, from *chona*, to sink, and *ilanga*; so *inhlilifa*, heir, from two words, meaning "to eat the estate of the dead one." Their names, also, are significant. Amanzimtoti is "sweet water;" one who wears spectacles is called "glasses," and the like.[1]

Mr. Grout gives some specimens of their literature, but we have not room for specimens, as they are not marked for either beauty or profundity.[2]

The people are of good stature, erect and slender; their limbs well propor-

A ZULU KRAAL.

tioned, and their frames well developed. Their color is from a copper to a jet black. Dark brown is, in their eyes, the height of beauty, or, as they say, "black with a little red." Their eyes are black, and their teeth well set. The features of the face vary from those of the negro to those of the Caucasian. Their huts are built of wattles, in the form of an old-fashioned bee-hive, round a cattle-pen, with a corresponding palisade outside. The doors are so low that one must enter on all-fours, and window there is none. The huts are from twelve to fifteen feet in diameter; there is one for each wife or other dependent. The calves, dogs, goats, and sheep occupy them along with their human inmates, though generally railed off from them. The fire-place is a shallow excavation in the midst of the calabashes, water-pots, millstones, and other paraphernalia of the household. The food is maize, first boiled, and then mashed between two stones. This is eaten with milk, generally sour. Their

[1] *Zulu-Land*, pp. 187–193.

[2] Do., pp. 193–200.

beer is drank from earthen pots or closely-woven baskets. In drinking from a brook, they wade in and toss the water with the hand into the mouth, like Gideon's three hundred. Their grain is threshed with flails, winnowed by the wind, and deposited in summer in bins of wicker-work, but in winter in bottle-shaped pits dug in, or rather under, the cattle-fold, and covered, first with stones and then with earth and the contents of the yard, to make it rain-proof. Their wardrobe is too scanty for description, being, for a man, an apron half a foot wide and twice as long in front, and another a little larger behind. The women wear a dressed cowhide, reaching from the loins down towards the feet.[1] Men wear a ring of hair on the head, sewed full of gum and charcoal, and polished like our boots. The women gather theirs into a knot, glued together with grease and red ocher. Beads they wear in great profusion wherever they can make them stick, even astride the nose and over the eyebrows. Bracelets of shells, armlets of brass, and glittering rings are worn by all, with many bones and bits of wood, teeth and claws of beasts or birds as amulets, and, to crown all, feathers stuck in the hair. The skin is also sometimes adorned by scars; and if, in a fit of anger, the husband cuts these off from his wife, she is in disgrace till she can raise up other ridges in their place. They use great quantities of snuff, which they carry in gourds, reeds, or buffalo horns, and convey to the nose with a bone spoon till the tears flow. The pipe is also a great favorite, and is used to disgusting excess. The chief business of the men is war. They also build the kraal and make the fences; leaving the women to thatch, make the floors, and raise the crops. Mr. Grout gives graphic descriptions of their watching the crops to keep them from being carried off by birds and beasts; also the process of Zulu milking.[2] There is also a detailed account of Zulu government and law; their political institutions; their courts of justice; their eloquence; and also their superstitions, which resemble those already described

A ZULU WARRIOR.

[1] The engraving opposite shows these peculiarities of the dress of both sexes, as well as the practical working of the superstition which looks on all sickness as caused by the witchcraft of some one whom it is the duty of the prophetess to point out for punishment. It illustrates what was said on page 89, concerning western Africa.— *Missionary Herald*, 1872, p. 264.

[2] *Zulu-Land*, pp. 94-114.

ZULU PROPHETESS.

in western Africa. The worship of the Amahlozi, or shades of their ancestors, is dwelt on, and its debasing effects; also their customs on the occasion of deaths and burials.[1] His chapter on women and marriage is a very sad one. The men were not allowed to marry till the chief gave them permission to leave the army. The women were sold for cattle without the least reference to their own choice, and generally to those able to pay the highest price, who were apt to be old men with a number of wives already. Mr. Grout tells of a poor girl who had attended the mission schools and got an idea of a better life, who fled to the bush among the wild beasts, from her relatives, who sought to force her into such a union. She came at midnight to his house, and begged with

WOMEN IN AFRICA.

tears that he would save her, declaring that she would prefer death to the fate before her; but her pursuers followed and insisted on their rights, in spite of the missionary's arguments and the girl's tears. Twice did she get away and come to him for help, but British law forbade him to do anything, similar cases having previously been decided against him in the courts; and he was compelled, amid his own tears, to give her up, and never heard from her again.[2]

The people in that warm climate lack the energy and forethought produced by our northern winters; but they are honest, though untruthful. Stealing is rarely known, and doors are not fastened, as in more civilized countries. They are light-hearted and cheerful; polite, and possessed of a fine sense of justice, but passionate, and apt to lose control of themselves in their passion.

[1] Do., pp. 132–162.

[2] Do., pp. 167–170.

XI.

GENERAL LITERATURE.

THE literary work of the missionaries of the American Board in foreign languages is so voluminous that anything like a complete catalogue of their writings is out of the question. This chapter can only aim at a general view of the nature and amount of the work accomplished. They have been much more intent on working than on keeping a record of their work. It would be interesting, also, to know the writer or translator of each publication, but this, also, is no longer possible, for the authors of some have been forgotten; others have been the product of several co-laborers; and still others have been so altered by repeated revision that one does not know to whom to assign them. Even translations have sometimes been so modified to meet the wants and modes of thought of the people for whom they were made, as hardly to retain the form of the original. So there has been no attempt to specify authorship, save in a few cases that could not well be avoided.

A list, such as it is, which much research and a good deal of correspondence has succeeded in getting together, may be seen in Appendix II.

A writer in the *Westminster Review* says: "The literature of a country is not composed entirely, or even principally, of the products of high genius. It does not depend on genius for its existence, or even for its utility. Great poets and great thinkers appear at long intervals, and make their eras memorable for generations. They are too few to constitute at any period a current literature." Doubtless some of the writings of missionaries are of ephemeral interest; but much from their pens has served its generation well, and some of their productions will survive as long as the languages in which they were written.

That there was need of their laying the foundations of a national literature among peoples that had not even an alphabet, is plain; but the literature of most of the heathen nations that had already one of their own was so full of falsehood in science, superstition in religion, and gross immorality and filthiness, that it only created a necessity for a new literature, free from these fatal defects.

In India the lullabies of the nursery, the stories of childhood, the dramas of the stage, the rites of the priest, and discourses of philosophers were full of silliness and impurity. The popular mind was preoccupied by absurdity and

obscenity; and though the government had published school-books and some works of general literature, no opposition to the corruption of idolatry had been allowed. The character of the native literature, even of the sacred books, demanded the creation of a Christian literature if the people were to be lifted out of their pollution; and the Rev. T. J. Scott, a Methodist missionary, says that a small library of Christian books can already be collected in India: "The Bedford tinker repeats his immortal allegory in at least seven languages there, and the Holy War is fought over again on the plains of India. Sandford and Merton rehearse their useful story to Indian youth, to whom we can now give *Line upon Line* in several languages. The children also have a *Peep of Day*, and even *The House We Live In* has been rebuilt for them, and the good *Dairyman's Daughter* leads her beneficent life over again in Hindostan."[1]

Another Wesleyan, Rev. E. E. Jenkins, in an address delivered in London, 1870, asks, Who translated the Bible into fifteen Indian languages? The missionaries. Who wrote the best grammars and lexicons of these languages? Beschi, Yates, and Winslow, missionaries. Who were the pioneers in those researches which, under Wilson and Max Müller, bring out the treasures of the Pali and Sanskrit? Yates, Gogerly, and Spence Hardy, missionaries. Who have given to literature the most minute and reliable accounts of the manners and customs, the religion and the castes of the Hindoos? The missionaries.

Dr. John Murdock, writing to Lord Napier in 1872, said: "It would be better for India if its whole indigenous literature were to share the reputed fate of the Alexandrian Library." A writer in the Indian *Evangelical Review* said that "the issue of books and pamphlets was increasing in India enormously, very few of the best vernacular books being free from obscenity, while the great mass of novels and poetry published in Bengal are distressingly filthy." Even the Vedas cannot be translated into English, on account of their impurity. The same was true of the literature of ancient Assyria. In translating the *Legend of the Deluge*, George Smith says of some parts of it: "These I do not give, as their details are not suited for general reading."[2] They described the amours of Ishtar.[3]

The Japanese love books, especially history, and have an extensive polite literature, but that also greatly needs purification; and while the mythology of China is free from the defilement that marks the Hindoo Pantheon, the same cannot be said of all its literature.

The apostles had a like corrupt literature resisting their efforts to elevate the community in their day, but they had no press to help them, for, in the great plan of God, the time for that had not yet come; though it seems that if Paul could have sent his epistles to the press, and so circulated them among all the churches, the history of the world might have been different from what it is; but then we must remember that the influence of the press may be for evil as well as for good, and which of the two shall prevail depends on the character of those that use it. It might have been that, if there had been a press in their day, it had been subsidized more by the enemies than by the friends of God and

[1] *Allahabad Conference*, p. 433. [2] *Assyrian Discoveries*, p. 173. *Chaldean Genesis*, p. 220.
[3] The Assyrian Venus.

man. It is one of the beneficent arrangements of Providence in our day, that the missionary not only has true science and a divine religion to sow broadcast over the nations, but the church at home supplies him with this mighty engine, aware of its capacities, and determined that they shall be employed for good. The late Dr. Osgood calls the press the people's university, whose graduates outnumber those of all others; the modern cathedral, whose daily morning and evening service is never intermitted, and whose pulpit finds no reluctant hearer.

Even the home periodical literature of foreign missions is not to be overlooked. In 1860 Dr. Anderson estimated the entire number of copies at three million ninety-seven thousand one hundred and twenty-seven, and some of the annual reports of the Board embody material most valuable for the future historian of modern progress. In consulting them for material in connection with this volume, the writer has been impressed more strongly than ever with their exceeding value. Destroy them, and it would be obliterating the mile-stones of progress. It would be like blotting out the records of the debates of the convention that formed the constitution of the United States, or of those sessions of Congress that adopted its successive amendments.

During the first fifty years of the operations of the Board, its issues in forty-six foreign languages were more than one billion five hundred million pages. At that time as many as twenty different races had received from it a written language, but the Micronesians were counted at that time as only one, and since then that one has become five. The Ponapean language has been reduced to writing by Rev. L. H. Gulick, M.D., and Rev. A. A. Sturges; the Kusaian by Rev. B. G. Snow; that of the Marshall Islands by Rev. G. Pierson, M.D., and Rev. E. T. Doane; that of the Gilbert Islands by Rev. H. Bingham, Jr.; while the Mortlock islanders were indebted for the same service to Obadinia, the daughter of a chief of Ponape, and a spiritual child of our mission there. Besides these, languages in western Africa and elsewhere need to be added to the list.

TURKEY.

In 1822 Rev. D. Temple took out a press to Malta. Fifteen thousand dollars had been subscribed in Boston for its working capital; and, after printing twenty-one million pages, chiefly in Greek, it was removed to Smyrna in 1833. Mr. Hallock went with it, and a font of Armenian type; also one of Arabic, ordered by Dr. King from Paris and London, at the expense of friends in France and England. Among others, the celebrated Mrs. Hannah More subscribed £5. After printing about twenty million pages at Smyrna, mostly in Armenian, the press was removed to Constantinople in 1853.

As far back as 1830, more than thirty-five million pages were printed in eleven languages, and these not only created readers by the facilities they furnished for learning to read, but often a small tract produced great results. In 1832 Dr. Goodell dropped a copy of *The Dairyman's Daughter*, which he had translated into Armeno-Turkish, at the door of a church in Nicomedia. Years after, he learned that a boy gave it to a priest, who not only read it himself, but

read it to another priest; and not they alone were brought to the knowledge of Christ, but others also. Nor did Dr. Goodell know anything of the good work thus originated, till the priest came to him in Constantinople, six years afterwards, for help in evangelizing that vicinity. Dr. H. G. O. Dwight found there a company of sixteen, who seemed all of them to have been "led by the Spirit of God" (Romans viii: 14). Two years later he found that a merchant from Adabazaar had carried several books there also, and that was the beginning of a good work in that city. A priest was converted, and though persecutions arose, yet more than fifty attended the meetings before a missionary had ever seen the place. So at Aintab, Arabkir, Tocat, Sivas, Killis, Zeitun, and many more places, the good work began before missionaries had been on the ground. Dr. E. E. Bliss said that the issues of the mission press went all over the land in advance of other books, and furnished the Armenians two thirds of their reading. In one village a noted thief bought a Bible and learned to read it. The result was his own conversion and the gathering the nucleus of a church in a very convenient chapel; another Bible which he sold gathered as many as fifty people in a village forty miles distant to hear it read. A colporteur found seventy men in a stable at Perchenj listening to the reading of the Gospel. The missionaries at Harpoot went there, and a revival followed, numbering twenty-one converts, growing in two years into a church of forty members, with native pastor, chapel, and parsonage. They sent out brethren, two by two, to neighboring villages, and in one, fifty hopeful conversions took place, resulting in a church whose pastor is one of the men who first went there with the Bible. A young man begged an Armenian Testament, got another man to read it, and gathered his friends every Sunday in a cave on the mountain to hear it, and so began the Protestant community of Albistan, which, in five years, numbered one hundred and fifty souls.

Such incidents illustrate the working of the leaven; and when we remember that in 1872 two hundred and eleven different works had been published in Turkey, numbering one million two hundred and nineteen thousand five hundred copies, and two hundred and eighty-nine million two hundred and sixty-one thousand one hundred and eighty pages, of which seven hundred and eleven thousand seven hundred were bound volumes, and one hundred sixty-seven thousand four hundred of them school-books, from primers and arithmetics up to works on astronomy and mental and moral science, and one hundred and sixty-six thousand five hundred Bibles, entire or in portions, we get some impression of the magnitude of the work that is being done and the change that is going on.

Well might Dr. Hamlin say:[1] "Those who measure the work by the number of churches and schools wholly misapprehend it. The change wrought in the religious convictions of millions testifies more fully to its power than all tabulated statistics." In his *Among the Turks* he says: "The Moslem treats Christians with a respect he never did before. They will converse on religious subjects with a freedom impossible thirty years ago. In a steamer on the Bosphorus I once overheard some Turks attributing the change to American

[1] *Missionary Herald*, 1872, p. 48.

missionaries, wholly unaware that one of them was within hearing. By their books, schools, periodicals, and versions of the Bible, they have exerted a wide influence outside of their direct labors."[1]

Dr. E. E. Bliss recognized the good hand of God in the preservation of the press. Though the enemy punished Protestants with fines, imprisonment, and the bastinado, and burned their books, they never tried to stop the press which produced the books. Dr. Schauffler called it "the one battery which the enemy could never silence."

An English writer said, in 1873: "The missionaries translated the Scriptures; they wrote books and edited newspapers, reviews, and magazines; they engaged in works of practical benevolence; they established schools; they poured out a flood of light from their printing presses; they expounded the Word of God. At Bebek they trained numbers of young men in sound scholarship for the work of the ministry. In the various languages of Turkey they circulated four hundred thousand Bibles, besides five hundred thousand other useful books, many of them translations of our favorite classics, besides a host of school-books and works on science."

SYRIA.

In 1826 Syria was much excited over Dr. Jonas King's *Farewell Letter* to his friends, giving his reasons why he could not be a Papist. It was first circulated in manuscript, and then printed in Arabic. That translation was by Asaad El Shidiak. Another into Armenian, by Bishop Dionysius, was sent in manuscript to Constantinople. There, also, the effect was wonderful. A meeting of all the Armenian clergy in the city was called to hear it read at the Patriarchate. Its proof texts were verified, and, by common consent, it was agreed that the church needed reform. It was also translated into Greek, and did good service there. Nor was its usefulness confined to its own pages, for it was the stone dropped into the stagnant lake, that caused ever widening circles in the form of *The Thirteen Letters* of Mr. Bird, Dr. Mishakah's works, and others.

Dr. King issued many works afterwards, some much larger and more elaborate, but none that produced an effect like this. Perhaps no man ever stirred a nation more intensely than Dr. King did Greece by his writings. It is owing to him that the Word of God is not bound in that kingdom. His power lay in his Luther-like courage, his pure doctrine, consistent life, and steadfastness under hierarchical oppression.

Up to 1835 our Arabic printing was done in Malta. One million forty-four thousand pages were printed in Beirût in 1839. Mr. G. C. Hurter began his labors as printer with the new type in April, 1841. Ten years later, he had only one hand press and two fonts of Arabic, less than that of English, a foundry and bindery. In 1853 a power cylinder press was added, with a third font of Arabic, and a fourth in 1858. The pocket Testament of 1860 was one of the most beautiful books in the language. As soon as it appeared, four

[1] p. 354.

thousand two hundred and ninety-three copies were sold for eighteen thousand three hundred and ninety-five piasters, in spite of the war and its desolations.

In 1862 six million eight hundred and sixty-nine thousand pages were printed, and the whole number of pages up to that date was fifty million;[1] in 1877, twelve million six hundred and thirty thousand seven hundred pages. At this date the printing office contained three steam power presses, two hand presses, a lithographic press, and electrotype apparatus.

Here, too, incidents illustrate the working of the truth. The learned Michael Mishakah, of Damascus, was led to Christ by reading the Bible and other issues of the mission press, and in his turn sent books to friends in other cities, as to Hums, where is now a Protestant church. In a war on Lebanon, a Bible from a plundered village opened the eyes of the plunderer to his sins, and brought him and several of his relatives to Christ. The church at Marsovan, in Turkey, grew out of a tract bought at Jerusalem eighteen years previously, by a pilgrim from that place. A man called one day on Rev. J. L. Lyons, in Tripoli, and gave a written statement of faith in Christ, learned wholly from the Gospel under the teaching of the Spirit alone. So the flood of an Arabic Christian literature is making the desert to bud and blossom as the rose.

PERSIA.

Mr. E. Breath introduced the press into Persia in 1841, and by the end of the year had printed half a million pages in modern Syriac. In 1860 there had been printed fifteen million two hundred and sixty-three thousand and twenty pages. In 1869 the whole number of pages amounted to nineteen million five hundred and twenty-nine thousand one hundred and fifty.

INDIA.

The first press established by the Board was at Bombay, in December, 1816. The following March fifteen hundred copies of a Marathi tract of eight pages were printed, and in May they began to publish the Gospel of Matthew. Their type was then so uneven that it had to be trimmed with a penknife to get a legible impression. As a token of the progress made since that day, a specimen of the type now in use is inserted opposite page 242, for the inspection of the reader. The New Testament was finished in 1828. In 1834 a hymn-book appeared, and in 1840 about thirty-one million pages of educational and Christian literature had been printed. At this time the marked success of the mission press roused its opponents to start several periodicals, some in support of idolatry and others advocating infidelity; but the grand answer to them all was the Marathi Bible in 1847. Opposition, however, was encountered from other quarters, whence it was least expected. It seems almost incredible to-day, that, after the British government in Ceylon had granted permission for the establishment of a mission press — for when the missionaries asked to be allowed to labor in Jaffna, with far-seeing wisdom, they asked for that also, and their request was granted — when Mr. J. Garrett arrived, in August, 1820, to take charge of it, the lieutenant-governor, Sir Edward Barnes, refused to allow

[1] *Oriental Churches*, Vol. II, p. 366.

him to remain on the island. To a memorial praying for a reconsideration of the order for the printer to leave in three months, he replied haughtily that the British government was abundantly able to Christianize its own heathen, and that Americans had better be employed in converting their heathen at home, but at any rate Mr. Garrett must leave at the time specified. The missionaries then asked that he might remain in a private capacity till after the monsoons, when sailing would be more safe; and begged leave to suggest that, to supply India with the same religious privileges enjoyed in England, would require thirty thousand missionaries, or five times the number of ordained ministers in England. Therefore, they feared many generations would perish before they could hear the Gospel, and they hoped that, however inferior to others, they might be allowed to do some humble part in the work; but Mr. Garrett had to leave Ceylon, in obedience to the mandate of an English governor, who "could not enter into the other parts of the memorial."[1]

The mission at Madras was mainly a literary depot. In 1838 eight iron printing presses, a lithographic press, and fifteen fonts of type, in English, Tamil, and Telûgû, a foundry and bindery, with hydraulic press, were purchased from the Church Missionary Society.[2] A font of Hindostani was added afterwards, and in 1840 the profits of the press more than supported the mission. That year eleven million six hundred and sixty thousand seven hundred pages were printed.[3] The Tamil Bible was printed in 1844, and the entire issues up to 1860 were three hundred and fifty-seven million nine hundred and sixty-one thousand six hundred and twenty-one pages — almost as many million pages as days in the year.

Mr. E. S. Minor, who had charge of the press at Jaffna in 1839, ascribed the changes going on in India largely to the influence of the printed page. The creation of a Christian literature has always been prominent in missionary work in India. Hindooism is losing its hold on the people. They feel that the Gospel is slowly but surely supplanting the Vedas, and the attitude of the government now is in marked contrast to the *régime* of the East India Company. The London *Quarterly Review*[4] says: "Twenty-five missionary presses in India are remarkably active, and in the last ten years have issued three thousand four hundred and ten separate works in thirty-one languages." These presses from 1842 to 1862 issued one million six hundred and thirty-four thousand nine hundred and forty copies of parts of Scripture, and eight million six hundred and four thousand and thirty-three volumes of Christian literature, including school-books.

A letter from Rev. A. Hazen, dated October 16, 1880, states that a prize offered for the best essay on an important practical subject was adjudged to a native of low caste, who, but for our schools, had never learned to read; that, too, though a Brahman was one of the competitors. Three of the committee of award were gentlemen not connected with the mission, and nothing was known of the writers till after the awarding of the prize. In this way missions lift up men of low degree, and open the fountains of a native religious literature.

[1] *Missionary Herald*, 1821, pp. 179-183; Tracy's *History of the American Board of Commissioners for Foreign Missions*, pp. 89-91.

[2] Tracy's *History of American Board of Commissioners for Foreign Missions*, p. 361.

[3] Do., p. 411.

[4] April, 1875.

The Lord's Prayer, in Tamil.

பரமண்டலங்களிலிருக்கிற எங்கள்பிதாவே! உம்முடையநாமம், தொழுதுகொள்ளப்படுவதாக. உமது இராச்சியம்வருவதாக. உமதுசித்தம் பரமண்டலத்திற் செய்யப்படுவதுபோலப், பூமியிலுஞ் செய்யப்படுவதாக. அன்றன்றுள்ள எங்கள் ஆகாரத்தை எங்களுக்கின்றுந் தாரும். நாங்கள் எங்கள்கடன்காரருக்குப் பொறுப்பதுபோல், நீரும், எங்கள்பாவங்களைப்பொறும். எங்களைச்சோதனைக்குட்படவிடாதையும். சகலதீமைக்கும்நீக்கி, எங்களைக்காத்துக்கொள்ளும். இராச்சியமும், பெலனும், மகிமையும், உமக்கே என்றென்றைக்கும் உண்டாயிருக்கின்றது; ஆமன்,

Sir Bartle Frère recently said of India: "Missionaries are frequently startled to find those who have never seen a missionary and yet have made a good advance in religious knowledge. The people of a remote village in the Dakkan removed the idols from their ancient temples, and agreed on a form of Christianity deduced from the careful perusal of a single gospel and some tracts." A Hindoo, reading in the *Bombay Guardian* an account of a meeting of the American Board, gave six hundred rupees to support three boys two years at the school of a catechist, where they could not previously be received for lack of means.

CHINA.

As early as 1833 our press was at work for China, though not in it, but at Singapore. There, also, some small treatises were printed for the Bugis of Sumatra and the Malays. In 1843 it was removed to Hong Kong. In 1844 the English government presented to the mission their large font of Chinese, originally cast for Dr. Morrison's dictionary, and worth $5,000. The press was removed to Canton in 1845, and in 1846 one million three hundred and thirty-one thousand eight hundred pages of Scripture were printed under the care of D. Ball, M.D., and of other works three hundred and twenty-five thousand two hundred pages. Its destruction by the Chinese, in 1857, involved a loss of $14,000, which was afterwards paid by the government. Up to 1860 twenty-five million pages had been printed in China, and fourteen million seventy-one thousand one hundred and sixty-eight at Singapore. In 1871 there had appeared five hundred different books, from the primer up to the Chinese Bible, in the Mandarin and Fuhchau dialects. There were commentaries, theological, educational, historical, geographical, mathematical, and astronomical works; treatises on botany and philology; Dr. Martin's translation of Wheaton on International Law; Dr. Hobson's medical and physiological works; and Mr. Wylie's translations of Euclid and Herschel; also a large hymn-book. Now, these five hundred have become more than a thousand, and their sphere of circulation is greatly enlarged. A few years ago two Chinamen from Poklau, one hundred miles east of Canton, carried home a box of tracts for distribution. A cordial feeling is arising toward foreign science, growing out of the appreciation of its truthfulness, and even Christianity is looked on with favor because of the science which it brings. It was so in the days of the early Jesuit missions, but is much more so now. The viceroy of Kiangnan sanctioned the publication of Euclid, though the translator pleaded for the Gospel in the preface. The Chinese read missionary literature more and more, showing its value in promoting the conversion of the world.

JAPAN.

Our missionaries entered Japan only in 1869, but since then the progress in all departments of the work is startling. The influence of Christian truth and science weakens the hold of Shintooism and Buddhism on the popular mind. The confidence of the educated classes is shaken in Confucianism also. The government has authorized a native convert to translate and publish William-

son's *Natural Theology*. The thoroughly Christian report of Dr. Berry, on prison discipline, was printed and circulated by the government. It authorized, also, the issue of a calendar for 1878, that advertises mission schools and book depositories, and the places where "the Jesus religion" is taught. A year ago a secular native paper pleaded for the removal of all restrictions from Christian preaching and burial services, and came out squarely for religious liberty.

The missionaries are straining every nerve to lay the foundations of a Christian literature for Japan. Besides the New Testament, there are many other books that stimulate intellectual development and mold it for Christ, and they pass at once into circulation. The annual report of the Board for 1879 informs us that, out of twenty-five hundred copies of the *Life of Christ*, by Rev. J. D. Davis, eleven hundred were sold in four months. One thousand copies of *Line upon Line* were nearly all sold, and a second edition in press. More than half of a thousand copies of a commentary on the Gospel of Matthew were sold. Eleven thousand tracts had been issued. The number of pages printed during the year was one million three hundred and eighteen thousand; or, including the *Shichi Ichi Zappo*, the religious literature of the year was two million seven hundred and fifty-three thousand pages — a glorious element entering into the national life of such an empire as Japan. Christian literature there is a prime necessity, both for the nurture of believers and to counteract the flood of skeptical productions. Whatever is needed for the advance of Christianity here is needed there — a thoroughly trained ministry, the highest Christian schools, and an evangelical literature. We began the work none too soon. We cannot prosecute it too energetically. Our books are sold openly in native bookstores. The work opens up like a fan, and missionaries are at their wits' end to keep up with it.

SANDWICH ISLANDS.

On the first Monday of January, 1822, the press began its work in these islands. Several masters of vessels came to witness the printing of the first sheet of a spelling-book, and Kaimoku, the governor, assisted in the work with his own hands. In 1830 twenty-eight different works had been printed there, containing ten million two hundred and fifty thousand pages, besides three million three hundred and forty-five thousand printed for them in the United States. There were then fifty thousand readers in the islands, and in 1840 the issues amounted to eighty-three million two hundred and eighty-four thousand eight hundred and fifty-seven pages. Twenty years later, Hon. R. H. Dana, Jr., writes that "our missionaries in less than forty years have taught that whole people to read and write, to cipher, and to sew; have given them an alphabet, grammar, and dictionary, and preserved their language from extinction, giving them the Bible, and works of devotion, science, and entertainment; and have established schools till the proportion of readers is greater than in New England." In 1860 more than two hundred works besides the Bible had been printed, to the extent of two hundred million pages. C. Nordhoff[1] says that education there is now compulsory, and schools free, and the illiterate a very

[1] *Harper's Monthly*, August, 1873.

small percentage of the people. Captain Reynolds, of our navy, says: "The islands owe their written language, their literature, and the education that enables them to read it, to the American missionaries."

AFRICA.

The press was introduced at Cape Palmas in 1837, and one hundred and eighty thousand five hundred and thirty-two pages had been printed in 1839. In 1860 two million five hundred thousand pages had been issued in the Grebo, Dikĕlĕ, and Mpongwe languages, and, through the influence of the press, fetichism was losing its hold on the people.

In 1860 two million pages had been printed for the Zulus, and in 1878 several editions of the New Testament, and portions of the Old, had been added to the school-books, hymn-books, and outlines of general and ecclesiastical history previously published.

INDIANS.

Up to 1860, twenty-six million three hundred and ninety-nine thousand eight hundred and seventy-six pages had been printed for the North American Indians. Of these, thirteen million nine hundred and eighteen thousand eight hundred were for the Cherokees, four million nine hundred and seven thousand one hundred for the Pawnees, three million seven hundred and eighty-eight thousand three hundred for the Choctaws, one million eight hundred and forty-one thousand for the Ojibwas, and smaller amounts for other tribes.

The writer read in the *Missionary Herald* for 1836[1] that "Mr. Byington has a Choctaw and English, and English and Choctaw dictionary, embracing about fifteen thousand words, nearly ready for publication. It has been carefully revised and corrected by the best interpreters. A grammar of the Choctaw language is nearly prepared by the same missionary. Whether the demand for either will justify their publication by the Board remains to be determined." He searched diligently for some notice of their publication, but found none. He wrote letters of inquiry, but got no answer, till, in looking over Trübner's catalogue of Oriental and linguistic publications for 1880, he found, along with a notice of Döhne's *Zulu Kafir Dictionary*, Grout's *Grammar of the Isizulu*, Doolittle's *Chinese Vocabulary and Hand-book*, Baldwin's *Manual of the Fuhchau Dialect*, Maclay and Baldwin's *Dictionary* of the same, Williams' *Syllabic Dictionary*, Andrews' *Hawaiian Dictionary*, and Stoddard's *Dictionary of the Modern Syriac*, the following modest notice:[2] "Byington. *Grammar of the Choctaw Language.* By the Rev. Cyrus Byington. Edited from the original manuscript in library of the American Philosophical Society, by D. G. Brinton, M.D. Crown 8vo, sewed, pp. 56. 7*s.* 6*d.*;" but no notice of the dictionary, which may be as yet one of those labors of love for the Master known only to Him who seeth in secret.

There is something startling in this work of providing a Christian literature for the world, when looked at from some points of view. More than two hun-

[1] p. 269. [2] p. 32.

dred and twenty years ago, God endowed a man in England with certain remarkable gifts of mind and heart; then, to develop them as he designed to have them developed, he led him through a varied experience of trial; and at the right point in that process of education, events were so ordered that he was put in prison, that there he might write a work the church would not willingly let die. The work has lived from that day to this in English language, and will continue to live while English shall be spoken on the earth. But even this sphere was not large enough in the divine plan; so, in the fullness of time, Christ sent some to the islands of the Pacific, who opened the lips of John Bunyan to speak to the Hawaiians in their own language before they passed away. He sent another detachment, who made the *Pilgrim's Progress* a household book in Armenian homes all over the Turkish empire. The same work was done for the dwellers in Syria and the one hundred and forty millions of the Arabic-speaking races. It was repeated in Persia. The same river of the water of life was made to flow among the millions of the Tamil-speaking people of India, and others of her teeming population, to say nothing of the work of other societies, and of what is now being done or yet to be done by our own; as, for example, among the millions of Japan, who are eminently fitted to be benefited by such a volume. No one can cast even a glance along the banks of such a stream of divine providence without getting a new perception of Him who is wonderful in counsel and excellent in working, and singing with a new joy, "Hallelujah! for the Lord God Omnipotent reigneth." And this is only one item in a countless multitude, every one under his personal supervision, whose results are to reach to the ends of the earth in this life, and show forth his praise forever in the life to come.

XII.

PERIODICAL LITERATURE.

In a volume of this kind, missionary periodical literature has a right to a separate mention. The distinctively religious periodical is the outgrowth of the Protestant religious life of the present century. It might be hazardous to affirm that the religious newspaper is still unknown in Papal Europe; but in 1844 an intelligent Frenchman in Turkey, a decided Romanist, to whom the writer occasionally lent a copy of the *New York Observer*, not only expressed great admiration for the religious sentiment that created and sustained such a paper, but affirmed positively that it would be impossible to sustain such an one among his co-religionists in France. The assimilating power of Protestantism is more manifest in the Papal church on this side of the Atlantic.

The religious periodical has the advantage over the pulpit in reaching a larger number, though very widely scattered; and it has the advantage over the book that it can speak the word demanded by the hour, and that, too, simultaneously in many communities, on a great variety of themes. It is essential to the force and unity of every aggressive movement of the kingdom of Christ. Preaching could not now afford to dispense with this invaluable auxiliary; and just as the needs of the age have called it forth at home, so the same needs call it into existence and sustain it in the missionary field.

The old Baptist mission at Serampore originated this kind of literature as early as 1818, when it issued the *Samarchar Darpan*, or Mirror of Intelligence. As early as 1834 our missionaries in the Sandwich Islands established the *Lama Hawaii*, a weekly periodical of four quarto pages, one of them being always filled by the pens of the natives. Another was commenced in 1835, and out of ten periodicals that have made their appearance at different periods, three are still flourishing: the *Hoku Pakifika*, *Nupepa Kuokoa*, and *Hoku Loa*, the last being most distinctively religious.[1] Micronesia is too scattered in space and too polyglot in language to sustain such literature as yet, though one missionary there speaks of a quarterly newspaper. The wonder is, that the Hawaiian Islands succeed so well.

[1] Anderson's *Hawaiian Islands*, pp. 261–262. Thirteen periodicals are mentioned in his later work on the Sandwich Islands, p. 396.

The pioneer of such literature in Turkey was the old ΑΠΟΘΗΚΗ ΤΩΝ ΩΦΕΛΙΜΩΝ ΓΝΩΣΕΩΝ[1] published in Smyrna, under the editorial supervision of Rev. D. Temple from 1837 to 1843. In 1839 it had twelve hundred subscribers. Vol. 3, number 31, for July of that year, now lies before the writer, a thin quarto of sixteen pages. This was also published in Armenian, and in 1854 was changed to a semi-monthly quarto of eight pages, and then to a weekly folio of four pages. (See *Avedaper* below.)

The first newspaper edited by a native Christian appeared in 1840, yet as late as 1860 a newspaper was rarely seen in the hands of the thousands that thronged the decks of the steamers in the Bosphorus or Golden Horn; but six years later the newsboy was plying his vocation there as busily, if not as successfully, as in our own cities. The influence of the fifty papers in various languages, published in Constantinople alone — about thirty of them dailies — was generally hostile to vital piety, so that there was a good field for any that should take the side of Bible truth.

The *Avedaper*,[2] a semi-monthly in modern Armenian, was established in 1854, and in Armeno-Turkish in 1857, with a circulation of over a thousand copies in each language. Rev. N. Benjamin was the first editor, and after his death Dr. H. G. O. Dwight. Dr. E. E. Bliss became editor in 1867, and estimated the number of his readers at ten thousand.

In 1872 the Greco-Turkish edition called the *Angeliophoros* was added to the two other languages, and in 1874 Rev. J. K. Green, then editor, reported[3] that each of the three papers, the Armenian, Armeno-Turkish, and Greco-Turkish, contained as much matter as one page of *The Congregationalist.* They rarely contained an advertisement, and no leads were used to space the lines. The first page of each was devoted to brief moral and religious articles and discussions; the second to education, religious intelligence, and general topics; the third to native articles and correspondence; and the fourth to current news. These papers furnished the only medium of communication between the missionaries and the people, for either setting forth their own views or repelling attacks of other journals. They also published reports of important meetings. They were taken by one in five of the adult Protestants, were highly prized, and carefully preserved. Afforded at the low rate of a dollar, postage included, which cost one third of the price, they were very popular. In 1874 the paying subscribers were about thirteen hundred. Eighteen hundred copies of the weekly and four thousand of the monthly were issued. Native papers had seldom more than from three hundred to five hundred subscribers, and charged three times the price of ours. They are largely an evangelizing agency, go into all parts of the empire, and into hundreds of families not Protestant, who are dependent on them for their evangelical knowledge. Each paper is read by from three to five persons.

Besides these are four illustrated monthlies for children. They are larger and more beautiful than those just mentioned. Three of them, in the same languages as the weeklies, were begun in 1871, and the fourth, in Bulgarian, in 1874, with two thousand subscribers. These are the first periodicals ever

[1] Magazine of useful knowledge. [2] Messenger. [3] *Missionary Herald*, 1874, pp. 298-302.

printed for children in Turkey, and they are greatly interested in them. The Bulgarians called for more copies than the press could supply.

The Turks allowed no printing for two centuries after the press was introduced in Europe, and newspapers were unknown till about 1834.

The *Zornitza*, begun as a monthly for children, was also issued as a weekly in 1877, with a steadily increasing circulation, which that year reached three thousand copies. It is edited by Dr. E. Riggs, and reaches more than two hundred and fifty cities and towns in European Turkey.

In Syria a monthly missionary journal was for a time published at Beirût, but in 1877, out of ten journals published in that city of eighty thousand inhabitants, seven were under the direction of Protestants, and exerting a wide influence in the land. One of these was the *Neshra*, a weekly paper published by the missionaries; another is the *Koukab es Soobah*,[1] a monthly for the children, edited by Dr. Jessup, with a circulation of four thousand. The *Muktatif*, a monthly journal of science and art, has a subscription list of six hundred.

In Oroomiah, Persia, the monthly *Rays of Light* commenced to shine in 1848, and still sheds its radiance over the plains of northwestern Persia and far up into the mountains of Kûrdistan. It is an octavo, and in 1866 contained three hundred and eighty-four pages. The edition was four hundred copies; each number containing a department of religion, education, science, missions, and poetry, not forgetting to have something for the children.

The writer cannot here forbear contrasting the condition of things when he was in Turkey with the present as indicated in these facts. Then, there was no paper published in western Asia, save a few in European languages at Smyrna and Constantinople. In 1842 there was no post over so prominent a route as from the capital to Bagdad. The residents on that long line of travel had to depend on an occasional government tatar, or the slow movements of caravans. Now, not only are there posts all through the interior, but along with business and friendly correspondence are these beginnings of a religious periodical literature waking up new ideas, and each fresh arrival leaving the widely-scattered readers thirsting for more. Even the telegraph wire now marks out the lines of the leading post-routes.

In India the foundations of a religious periodical literature have also been laid. In 1839 the *Oriental Temperance Advocate* was published at Ceylon, in an edition of one thousand copies, though this may have been only a single pamphlet by that name. In 1842 a monthly periodical with the appropriate name of *Dnyanodaya*[2] was commenced at Ahmednuggur, on a lithographic press, and in 1845 was transferred to Bombay and types. For eight years it was edited by Rev. R. W. Hume. It soon became a semi-monthly, so eager were the people to receive it, and has now long been a weekly of twelve royal octavo pages, with an illustrated monthly supplement for children. Each volume contains four hundred pages, and is ably edited by Rev. C. W. Park, aided by Sháhû Dáji Kûhadè, an energetic native convert. Its circulation equaled that of all the other Marathi papers put together. The *Dnyanodaya Almanac*, forty-eight pages, super-royal octavo, has been published for several years.

[1] Morning Star.

[2] Rise of knowledge.

As far back as 1844, *The Bombay Witness*, a religious paper in English, was published by the missionaries; also *The Bombay Temperance Advocate*, a total abstinence paper. Rev. George Bowen, who went to India in 1848 under the American Board, established the *Bombay Guardian*, also a religious paper. In Ceylon the *Morning Star*, a semi-monthly, partly in English, but mostly in Tamil, was commenced some years previous to 1853. A monthly in Tamil, entitled *The Children's Friend*, also issued from the press in 1868. At Madras, in 1844, a semi-monthly in Tamil, called *The Aurora*, made its appearance. In 1869 Rev. George T. Washburn commenced a monthly called *The True News Bearer*, which is the only distinctively Tamil religious paper on the continent. He is also editor of the *Satthiawarttamani*, in Tamil and English.

The Rev. C. W. Park established *The Indian Evangelical Review*, a quarterly journal of missionary thought and effort, in 1873, and closed his connection with it at the close of the sixth volume, in 1879. Each volume is an octavo of about five hundred and fifty pages. A few of the topics treated of are:

I. Relations of the Native Aristocracy to the British Government; Early Glimmerings of Divine Truth in India; Old Canarese Literature; Buddhism; Shiah Posh Kafirs; Education in Bengal; Subjects for Investigation in India; The Garos; Use of Sacrificial Terms in the Languages of India; The Afghans; Buddhist Prayers; The Ram Sneh Religion; Notes on Indian Prosody and Poetry; Siam and its Rulers; Education in India as Related to Christianity.

II. Indian Disestablishment and Disendowment; Rights of Native Christians; Logic of the Vedanta; Female Education in Benares; Propagative Religions; Late Lieutenant-Governors; How to Teach Greek to Natives; Relations of Europeans and Natives; Wurm's Indischen Religion; Syrian Christians of Malabar; Christian College for Southern India; Native Christians in Bengal, by one of them; The Bhagawad Gita; Cochin China; The Karens as a Race; Bengali Christians, by one of them; Name of Our Lord in Urdû and Hindi.

III. Apostolic and Indian Missions Compared; Canarese Lullabies; Hindoo and Jewish Sacrificial Rituals; Social and Religious Movements among the Mairs; Rise, Progress, and Prospects of the Brahma Samaj; History of Protestant Missions in India; Theological Schools in India; Caste in the Native Church; John Wilson, D.D.; Duty of Friendly Relationship between Catholic and Protestant Missionaries; English-speaking Natives of Upper India, by one of them.

IV. Work of a Translator of the Bible in India; Rome's Relation to the Bible; Gwalior; The Kingdom of Kashgar; Indian Divorce Act and Native Christians; Child Marriage in India; The Gospel and Islam; Translation of the Tract "Ram Pariksha;" Hindoo and Mosaic Cosmogonies, by a native; The Kudumi; Our Indian Bible; Ajudhia as it Was and Is; Caste in its Relation to the Church; Notes on South Indian Comparative Philology; Asceticism—its Relation to Mission Work.

V. Christians of Salsette and Bassein; Sahet Mahet, the Metropolis of Buddhism; Woman's Work for Woman; Polyandry in the Himálaya; French Annual Review of Hindoo Literature, Dr. Duff.

VI. Roman Catholics in South India; Self-support among the Bassein Karen Converts; Oudh; Dr. Duff; Famine and the Gospel; The Parsi Holy Books; Missionary Methods; The Sinless Prophet of Islam; Jagjiwan Das, the Hindoo Reformer; Recent History of Keshab Chandra Sen's Brahmism; The Bungalore Conference.

There are a number of other articles more distinctively religious or theological, but these give an idea of the literary range of the work, and so are more appropriate for quotation here. The *Review* is now published at Calcutta, under the editorial care of Rev. R. S. Macdonald.

The need of a Christian periodical literature in India will appear sufficiently from the fact mentioned as early as 1845,[1] that there were then in Bombay three weekly newspapers and one monthly magazine opposing Christianity; also a paper at Poona, and a monthly magazine in the Gujerati language, with three papers in the same tongue, besides two in Persian and one in Hindostani, all uniting to retail the works of Paine, Voltaire, and more recent assailants of the Bible.

In Japan, though the work there is so recent in its origin, the *Shichi Ichi Zappo*[2] was established in 1876, and, though thoroughly Christian, has a large and increasing circulation. The editor is Rev. O. H. Gulick. It is met with on the railroad car, on the inland and ocean steamers, and on the Osaka river boats. Men live in the heart of the empire who have never seen a missionary, but have been led to Christ by its pages. It informs Christians in Japan of the progress of the Gospel in their own country and throughout the world. It is the only Christian newspaper in Japan, where Buddhists, alarmed for their system, sent over one of their leaders a few years ago, to gather in his drag-net every work against Christianity that could be found, and where several periodicals are dealing out to the people the precious things that he was able to collect as ammunition for their warfare against the truth; among others a slanderous and scurrilous so-called *Life of Jesus Christ.* An edition of eleven hundred and fifty copies is issued weekly, giving an account of the religious, political, and scientific progress of the world.

Besides its distinctively religious articles, *The Weekly Messenger* contains articles from the pen of Dr. Berry on topics of social science, such as, The Principles of Hygiene; Wise Sanitary Arrangements and Proper Drainage; also on such medical themes as vaccination for small-pox, the treatment of cholera, fever, and the like.

Among the Zulus a periodical was issued in 1861, called *The Morning Star*, with quite a respectable native subscription list. It has since given place to *The Torch-Light*, which goes throughout Zulu-Land, giving light to them that sat in darkness.

Among our own Indians, the Dakota *Iapi Oaye*[3] commenced its rounds among that tribe in 1871, under the editorial charge of Rev. J. P. Williamson. After his death Dr. S. R. Riggs and Rev. A. L. Riggs took charge of it. It was received with such enthusiasm that in a year the size was doubled, and twelve hundred copies printed instead of five hundred; and this, with its illus-

[1] *Missionary Herald*, p. 30. [2] Weekly Messenger. [3] Word Carrier.

trations, made it more popular than ever. The Indians not only pay for it — they write for it; and its influence is ever more salutary, and the circle which it reaches continually increases.

These missionary periodicals, published in so many languages and in so many unevangelized portions of the globe, furnish an instrumentality full of promise both for bringing those now in darkness to the knowledge of Christ and for building up new converts in the knowledge of his truth, and should constantly enlist our prayers that their editors may be so guided by the Holy Spirit that He may use the truth they set forth for the upbuilding of the kingdom of our Lord Jesus Christ.

XIII.

MUSIC.

Missionaries have opportunities to study the music of a people to an extent to which no traveler could possibly attain, and several of them have given us the results of their investigations in this department. Rev. A. L. Riggs[1] gives us an account of Dakota songs and music. He gives specimens of war songs, love songs, songs of sacred mysteries, and social songs. They are very simple, and abound in repetitions, but perhaps for that reason are the more true to nature. Of these we quote only one, expressive of a widow's grief:

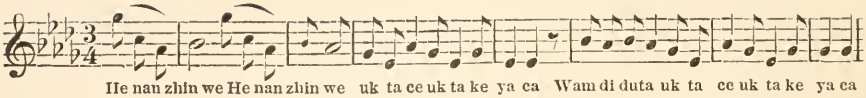
Lo, greatly I am distressed,
Lo, greatly I am distressed,
    My child's father,
    My child's father,
    My child's father,
    My child's father,
Lo, greatly I am distressed.

Sorely am I distressed,
Sorely am I distressed,
Sorely am I distressed,
    The earth alone continues long,
    I speak as one not expecting to live,
Sorely am I distressed,
    The earth alone continues long —

words expressing unutterable heart-weariness and despair.

Their music is of the simplest kind. It has only melody with rude accompaniments, more for marking time than for harmonic effect. In their dances the men sing the song, and the women a shrill falsetto chorus of a single note, like "ai, ai, ai," keeping time with the drums. Like other uncivilized peoples, they do not appreciate harmony. The minor key is their favorite, especially in their love songs, though the major occurs in their war songs. The following is a specimen of their amatory melodies:

[1] *Gospel Among the Dakotas*, pp. 450–484.



Their instruments are the drum,[1] rattle, and pipe. The hoop of the drum is over a foot in diameter and three or four inches deep, sometimes ten. It is covered with skin only on one side, and beaten with one stick. The rattle is made of some hard segments of deer hoofs tied to a tapering wooden rod a foot in length. The conjurers sometimes use a gourd-shell with some smooth pebbles in place of the original filling. The most common pipe is made of sumac wood, like a flageolet, about nineteen inches long and five eighths of an inch in diameter, interrupted by a peculiar partition that forms the whistle. Six holes are burnt on the upper side, and a brass thimble forms the mouth-piece. The pitch is A prime changed to G prime by a seventh hole. Sometimes it is made of the long wing or thigh bone of the swan or crane.

The power of Dakota music is not to be measured by its rudeness, but by the adaptation of its wild melody to the wilderness and its savage life, where, under misty moonbeams, the night air bears the plaintive chant, with the hollow bass of the drum-beat, along the waste, in an atmosphere palpitating with possible war-whoops, and where each bush may hide a lurking foe.

Although the Chinese government has a "Board of Music" connected with its "Board of Rites," who "are to study the principles of harmony and melody, compose music, and prepare instruments suitable to play it on public occasions," few nations have less real melody.[2]

According to them, only those who understand the science of music are fit to be rulers of men, and Confucius is said to have been once so ravished with music that for three months he did not perceive the taste of food.[3] The army use chiefly the gong and trumpet, but they have almost every stringed, wind, and percussion instrument that we have. Dr. Williams gives the Chinese characters and a printed scale.[4] Their notes, beginning at the bottom of the first octave, are ho sz i chang chè kung fan liu wu i chang chè kung and fan, but their succession is not accurately represented by our staff. If the first note be taken as the tonic, they form a diatonic octave, with a supernumerary note an octave above sz, ho being an octave below liu. The semi-tones i and fan are seldom used. No chromatic scale exists among them, and their written notes are exceedingly complicated and cumbersome — each note being a cluster of characters denoting a number of different things — and are different for nearly every kind of instrument, so that they usually learn by the ear and not by note.

Their notes indicate only pitch in a certain scale, and do not denote length or absolute pitch. No time is marked. They know nothing of counterpoint. Flats, sharps, ties, and other similar marks are wanting. Nor are their tunes set to any key. DeGuignes says: "It would be very difficult to give a Chinese song the proper tone without hearing it sung by a native, and even then one

[1] Chan chay ga = wood kettle.

[2] Williams' *Middle Kingdom*, Vol. I, p. 332.

[3] *Chinese Repository*, Vol. IV, p. 4.

[4] Do., Vol. II, p. 164.

cannot perfectly imitate their notes. They seem to issue from the larynx and nose; tongue, teeth, and lips having little to do with them. Their music is on a high falsetto key, somewhere between a scream and a squeal; yet it is plaintive and soft, and not without sweetness."

They have seventeen kinds of drums, from the large ones in temples down to quite small ones. Gongs, cymbals, and tambourines are in great variety. They have also an arrangement of twelve cups, more or less filled with water and struck with rods. They are fond of the sounds produced by striking together small pieces of sonorous glass. The kin, or scholar's lute, is their most finished stringed instrument. It is very ancient. Its name means to restrain, because they say it restrains evil passions. It is a board four feet by eighteen inches, convex above and flat below, with seven strings of silk passing over a bridge near the wide end, and tightened by nuts beneath. They are fastened to two pegs at the smaller end. The sounding-board is marked by thirteen studs, so that the strings are divided into two equal lengths, then into three, and so on up to eight, the seventh being omitted. The seven strings have a compass of a ninth. Each of the outer strings is tuned a fifth from the middle one, and this interval is treated like our octave, for the kin is made up of fifths. Each outer string is tuned a fourth from the alternate string, so that there is a major tone, an interval tone less than a minor third, and a major tone in the fifth. The Chinese leave the interval entire, and skip the half-tone, while we divide it into two unequal parts; so our instruments cannot play their tunes. There is one instrument like the kin, with thirty strings, and another with thirteen, played with plectrums.

A number of instruments resemble the guitar and spinet, some with strings of silk, and others with strings of wire, but none of catgut. The *pipa* has four, secured like those of the violin. It is three feet long, and the unvarnished upper table has twelve frets. The strings are tuned at intervals of a fourth, a major tone, and a fourth, so that the outer strings are octaves to each other. The *san hien* resembles a rebeck, but the neck and head is three feet long, and the cylindrical body is hollow, and usually covered with a snake's skin, on which the bridge is set. The strings are tuned as fourths to each other. The *yueh kin*[1] has a large, round body and short neck, but with only four strings, that stand in pairs, which are unisonous with each other, with an interval of a fifth between the pairs. The rebeck is like the *san hien*, but ruder in structure; merely a bamboo stick thrust into a cylinder of bamboo, with two strings passing over a bridge, and tuned at intervals of a fifth. As the bow passes between the strings, much care is needed not to touch the wrong string. We wonder how any can enjoy the harsh grating of this wretched machine, but nothing is more popular among the Chinese, and their skill in playing it deserves a better result. Sometimes a cocoa-nut is used in place of the bamboo cylinder, with no improvement in the music. The *yang kin* is a dulcimer, consisting of a number of brass wires of different lengths, fastened on a sounding-board — a sort of incipient piano-forte. The *săng* also is the embryo of the organ, with a hol-

[1] Full moon guitar.

low, cone-shaped wind-chest, having a mouth-piece on one side, and thirteen reeds of different lengths inserted in the top. Some of these tubes have valves opening upwards, and others downwards; so some sound while the breath is blown in, and others when it is drawn out. They stand in groups of four, four, three, two, and those with valves are so placed that the player can open or close them at pleasure, so that more or less of them can be employed, greatly varying the sounds. Even the Chinese, however, count it more curious than useful.

Their wind instruments are more noted for noise than sweetness. The Hwang tih is twice the length of our fife, and its bamboo tube is pierced with ten holes: two near the end and unused, and one midway between the hole for the lips, which is made one third of the way from the top, and the six equidistant ones for the fingers. The *shu tih*, or clarionet, has seven holes, but no keys. The bell at the end is of copper, and so is the mouth-piece. Its tones are deafening, and well illustrate Chinese musical taste. A smaller one, like a flageolet, has a curious reed, so shaped that it can be blown by the nose. So a street musician fits one of these to his nose, slings a small drum under one shoulder, suspends four small cymbals on his breast, and, with one monkey on his head and another on his shoulder, draws a crowd to listen to his orchestral performance and singing. Their horn, like a trombone, can be lengthened or shortened at pleasure. In processions, its hollow booming contrasts well with the shrill clarionets.

The *lo*, or gong, is the type of Chinese music; a crashing harangue of rapid blows on this, with the rattling of drums, and the shrill notes of clarionets, and cymbals, constitutes the great body of their music. They have heard good Portuguese bands for ages, but never adopt an instrument or a tune. This want of appreciation of pleasant rhythm appears also in the absence of meter in their poetry. Each line consists of so many words and set pauses, but neither measure nor rhythm.

A Chinese band makes a European think of Hogarth's picture of the "Enraged Musician." Each performer seems to have his own tune, and to be bent on drowning the noise of all the rest; and yet they keep good time, only no two instruments are tuned on the same key. Still, the pupils in mission schools show a good ear for music.[1]

Rev. E. Smith, D.D., of Beirût, found that hymns composed according to Arabic rules of prosody could seldom, if ever, be adapted to our tunes; and our musicians found it hard to detect the nature of the intervals in Arab music, or write their tunes. Arab singers, on the other hand, could not repeat the octave with one of our musical instruments. A treatise on Arab music, by Michael Mishakah, of Damascus, explained the difficulty, and from that, together with Kosegarten's edition of *Ispahany's Book of Odes*, to which is prefixed *Faraby*[2] *on Ancient Arab Music*, and another ancient manuscript, Dr. Smith wrote a valuable treatise on the subject, which was published in the *Journal of the American Oriental Society*,[3] with explanatory notes by Prof. E. E. Salisbury.

[1] G. T. Lay, in *Chinese Repository*, Vol. VIII, pp. 30–54. *The Middle Kingdom*, Vol. II, pp. 164–172.
[2] *Obiit* A. H. 339.
[3] Vol. I, pp. 171–210.

He says that sound is naturally divided into groups of seven tones, rising one above the other, each the response to the one below it, and the base of the next above. The group is called an octave,[1] and the octaves are composed of tones.[2] The first is called yegâh; then follow in order, 'ösheiran, 'arâk, rest, dûgâh, sigâh, and jehârgâh. This is the first octave. The second in the same order is nawa, huseiny, auj, mâhûr, muhaiyar, buzrek, and mahûrân. The last is the response to jehârgâh. The first note of the third octave is remel tûty, and is the response to nawa, and so on. The next octave above is response to the response of nawa, and so *ad infinitum*. In like manner, in the first descending series below yegâh, they say the base to jehârgâh, the base to sigâh, and so on; then the base to the base of jehârgâh, and so in continuance. The intervals between these notes are unequal. The Arabs divide them into two classes, the greater containing four quarters, and the less containing three. The former are from yegâh to 'ösheiran, from rest to dûgâh, and from jehârgâh to nawa; the latter from 'ösheiran to 'arâk, from 'arâk to rest, from dûgâh to sigâh, and from sigâh to jehârgâh. The first class, then, has three intervals with twelve quarters, and the second class four intervals with twelve quarters. The modern Greeks divide the intervals into seconds, and make three classes. One, corresponding to the first Arabic class, divides the interval into twelve seconds; the second class divides it into nine seconds, and is from dûgâh to sigâh, and from huseiny to auj; the third class, from sigâh to jehârgâh, and from auj to mahûr, has seven seconds to the interval. So their octave contains seven intervals and sixty-eight seconds. The Arab and Greek scales coincide only at four of the sixty-eight seconds, or four is their greatest common measure.

This is the substance of only four pages out of thirty devoted to Arab music. Chapter II describes melodies now in use, and Chapter III is devoted to musical rhythm. Then follows a chapter of thirteen pages on musical instruments, describing stringed instruments, as *El ud*,[3] the Arab guitar, the kemenjeh, tambûr, and kanûn; wind instruments, as the nay, kerift, mizmâr, sŭnnây, urghun,[4] and jenah. The drum and tambourine, as serving merely to measure time, are not described.

In India, music was formerly more scientific than at present. Its martial music has changed with its government. Its religion had little to do with music, except in connection with the dancing girls of its temples. Operas are unknown, and theatrical music is of a low order. Marriages are the principal occasions for musical display. The Hindoos have many kinds of instruments, as drums, trumpets, horns, cymbals, hautboys, and fiddles; but the performers have little skill and less taste. The marriage orchestra varies from six to twenty performers, and the larger the company the more noise and din. Singing is an accomplishment of women of doubtful morality, and is a favorite amusement of the wealthy.

Singing has been introduced into Christian worship in India, and the native Christians show their love of music in singing, not only in their social meetings, but in their families and when alone. A favorite and most successful method

[1] Arabic, diwan. [2] Arabic, burj. [3] Whence our lute. [4] Organ.

of introducing the Gospel to the notice of the heathen in western India is the kirttan, a name they give to solo-singing by native evangelists, with instrumental accompaniment.[1]

The power of these kirttans over the natives is illustrated by the following incident. In September, 1880, Mr. Bruce, of Satara, visited Wai with his trained kirttan choir. The people flocked from all parts of the city to hear, especially as the leader was a converted Moslem. The question was frequent, "Who taught them to sing like our kirttan wallas?" "Is the Moslem really a Christian?" "How did that happen?" The performance was held in the government city office, which, as it was open on two sides, allowed hundreds to stand outside and hear. So a great multitude heard their own countrymen singing of the way of salvation through a crucified Saviour, who never heard of him before; and they stood in the rain, too, to hear it to the end. The whole city was moved. It was the great topic for many days, and the missionary, as he went here and there through the city, met the inquiry, "When will the Satara Sahib come and give us some more kirttans?"[2]

Rev. H. Ballantine prepared a Marathi hymnal for the churches in that mission, and another for the children, chiefly translations of favorite hymns at home, which are said to possess the spirit and beauty of the originals. He has been called the Watts of Marathi hymnology.

Rev. E. Webb, of the Madura mission, was much interested in the researches he made into the principles of Tamil poetry. Their lyric poetry is often extremely rhythmical and elaborate in its construction; and though many learned men compose it, they cannot explain the principles of their own compositions. The whole Ramanayam is translated into this style of poetry, and sung throughout the country with music and dancing. He found European tunes unsuited to Tamil taste, and our meters not adapted to the language.

In the latter part of 1853 he published a Tamil hymn-book, divided into four parts: hymns in English meter, children's hymns, chants with printed music, and hymns in Tamil meters, the last forming the largest half of the book. Many copies were immediately taken by Episcopal missions in Tanjore and Tinnevelly; and the village congregations of our own mission took greater interest in the service, and singing was introduced in places where it had been unknown before in Christian worship. An edition of two thousand copies was exhausted in a few years, and a new one was issued in 1858 by the South Indian Christian School-Book Society. The Tamil people are passionately fond of poetry and music, and, though they scarcely listen with patience to the most important truth in prose, their attention is instantly captivated by the same ideas expressed in poetry and sung. When Mr. Webb was in this country in 1860, at the meeting of the American Oriental Society, held at New Haven, in October, he gave an account of the construction of Tamil verse, defining first the two kinds of syllables, then the feet, and, last, the stanzas in which these are combined. He said that when it was found that the natives did not recognize any measure in our verse, or learn to sing our music, hymns were

[1] D. O. Allen's *India*, p. 453; Dr. Anderson's *India*, p. 89; *Missionary Herald*, 1880, pp. 521–524.

[2] Rev. S. R. Wells, in the *Report of the American Marathi Mission* for 1880, pp. 45–46.

procured to be written by native converts, in their own meters, and adapted to their own melodies, with most satisfactory results. He translated a number of them to the audience, who listened with much interest. He read specimens, also, in the original, of a highly artificial construction, with elaborate rhyme, alliteration, and assonance.

He described, also, the musical modes of the Hindoos, known throughout India under the same Sanskrit titles, indicating their relation to our own scale, and showing their adaptation to the expression of different emotions.[1]

Rev. G. T. Washburn took up the work thus begun by Mr. Webb, and carried it on to a larger success. In 1863 he carried through the press two volumes of Tamil lyrics. These were not translations of English hymns in English meters, but devotional songs by native converts, in Tamil meters. India excelled Greece in ancient times in her cultivation of music; and though no new tunes have been written for centuries, those of the best periods still exist, and for these the hymns were composed. Some of them are equal to our best English hymns.[2]

Rev. W. W. Howland prepared a volume of tunes for the Tamil hymn-book of Dr. Spaulding.

[1] *Journal of American Oriental Society*, Vol. V, p. 271; Vol. VII, p. v. *Missionary Herald*, 1854, p. 150; 1858, pp. 59–60.

[2] *Missionary Herald*, 1870, p. 130.

XIV.

BIBLE TRANSLATIONS.

English literature began with our English Bible. There was none before the time of Wickliffe, and Chaucer gives evidence of having read Wickliffe's version of the Scriptures. Ever since then the Bible has quickened the intellectual life of all who use the English language. Take out of the literature of England and America all that has flowed into it from the Word of God, and a few broken fragments only would remain of the magnificent structure we proudly call our English literature. Now, missionaries, in translating the Scriptures into other tongues, seek to confer on others the same inestimable blessings which the Bible has conferred on us. Dr. W. Goodell said: "I never saw anything do such execution as the Bible does. It is becoming the great book in the East."

Not less than one hundred and eighty[1] translations of the Bible, in whole or in part, have been made by modern missionaries. Since 1804[2] new translations have been made in two hundred and twenty-six languages.[3] One hundred and eighty-seven of these were published in connection with the British and Foreign Bible Society, and forty-one of them by the American Bible Society.

The first object of a Protestant mission is to give the Word of God to a people in their own tongue, wherein they were born, and in which the family converses at home.

The first Bible printed in America was John Eliot's Massachusetts or Mo-

[1] This is the statement of Dr. Mullens.

[2] Rev. C. E. B. Reed, *Mildmay Conference*, 1878, pp. 230–231. Dr. Anderson, who wrote in 1860, differs from him in his estimates. Mr. Reed says the entire Bible has been rendered in about fifty-five languages (Dr. Anderson thirty-nine), the New Testament in eighty-four (Dr. Anderson thirty-five), and parts only in eighty-seven (Dr. Anderson forty-eight) (*Foreign Missions*, p. 112). Dr. Anderson said, in 1869 (*Foreign Missions*, p. 212), that scarcely less that one hundred millions of copies of Scriptures in whole or in part have been issued since 1804, and not less than one tenth of these have gone outside of Christendom, and these last were more than double the whole number printed in Christian lands up to that date (1804), during three centuries and a half, and more than were in existence from Moses to the Reformation. The difference between Dr. Anderson and Mr. Reed is explained by the later and more complete investigations of the latter. See his tables of new versions during the present century (*Mildmay Conference*, 414–428).

[3] Of these two hundred and twenty-six translations, fifty-five are of the whole Bible, eighty-four of the New Testament, and particular parts eighty-seven. In the seventy-fifth *Annual Report* of the British and Foreign Bible Society, Berlin Branch, 1879, p. 67, it is stated that Bibles or parts of the Bible have been printed in three hundred and eight languages, and sixty or seventy languages have been reduced to writing by missionaries. (*Foreign Missions*, by Christlieb, p. 19.) The seventy-sixth *Annual Report* of the same (p. 260) enumerates three hundred and sixteen *versions* of the Bible or parts of it, which have been published by Bible societies.

hican Bible, Cambridge, Massachusetts, 1663, the New Testament having appeared two years earlier. The title is Mamussee Wunneetupanatamwe Up-Biblum God, Naneeswe Nukkone Testament kah wonk Wusku Testament. Ne quoshkinnumuk nashpe Wuttineumoh Christ noh oscowesit John Eliot; *i. e.*, the whole holy his Bible God, both Old Testament and also New Testament. This turned by the servant of Christ, who is called John Eliot. The work is now exceedingly rare, and commands a great price. The following is this version of John i: 1–5:

Weske kutchissik wuttinn*oo*waonk ohtup, kah kutt*oo* wonk *oo*wetódtamun Manit, and ne kutt*oo*onk Manittoooomoo. 2 yeu nan weske kutchissik weetchayeutamun God. 3 Wame teunteaquassinish kesteausupash nashpe nagum, and matta teag kesteausineup webe nashpe nagum ne kesteausikup. 4 Ut wuhhogkat pomantamoonkohtop, kah ne pomantamoonk oowequaiyeumuneàop wosketompaog. 5 Kah wequai sohsumoomoo pohkenahtu, and pohkenai matta wutattumunnmooun.

In the fourteenth verse, the clause, "full of grace and truth," reads thus: numwabehtunk kitteamonteanitteaonk and wunnamuhkuteyeuonk.

In 1818, Rev. C. F. Dencke, a Moravian missionary at New Fairfield, in Upper Canada, sent the Epistles of John in Delaware to the American Bible Society, and an edition was published shortly after.

In 1832, John and Peter Jones, Ojibwa Indians in the service of the Methodists, had their version of the Gospel of John in Ojibwa published by the British and Foreign Bible Society in London. In 1838 an edition was issued by the American Bible Society.[1] The same society issued the entire New Testament in 1844. Dr. James had previously printed his own translation in 1833. The Gospel of Mark was translated by Peter Osunkerhine, a missionary of the Board, into Abenaquis, his native tongue, and printed at Montreal in 1845.

In 1700 Rev. Mr. Freeman translated the Gospel of Matthew into Mohawk, and some chapters were printed by the Gospel Propagation Society, New York, 1714. In 1787 another translation of Matthew,[2] by Joseph Brant, a Mohawk chief, was printed in London at the cost of the Crown, and another edition, with English in parallel columns, by the New York District Bible Society, in 1829. The Gospel of John was translated by a Cherokee naturalized among the Mohawks, and published in London, 1805, by the British and Foreign Bible Society, in the first year of its existence. Another edition was published in New York, 1818, by the American Bible Society. In 1832, the three epistles of John, translated by Rev. Mr. Williams, and the Gospel of Luke, translated by A. Hill, a Mohawk chief, were printed in New York by the Young Men's Bible Society, and in 1835, the Acts of the Apostles, and the Epistles to

[1] Bagster's *Bible of Every Land*, p. 372.
[2] Do., p. 376, but the Brinley Catalogue says that *Mark* appeared in 1787.

the Romans and Galatians, by the same translator. In 1836, the same society published the Epistles to the Philippians, Colossians, Thessalonians, to Timothy, Titus, and Philemon, translated by an educated Mohawk named Hess. In 1829 the American Bible Society printed the Gospel of Luke, translated into the Seneca language by Rev. T. S. Harris, a missionary of the American Board.

In Cherokee, the first Gospel printed was Matthew, in 1832, followed by Acts, in 1833, at New Echota; the third edition of Matthew appearing in 1840, at Park Hill, at the cost of the American Board. In 1844, the Gospels, Acts, and Epistles to Timothy were printed at the same place, in the Cherokee character, and in 1859 the entire New Testament was completed and printed under the superintendence of Rev. S. A. Worcester and Rev. C. C. Torrey.

The first part of the Bible published in Choctaw was the Acts of the Apostles, Boston, 1839, at the cost of the American Board. The Epistles of John appeared at Park Hill in 1841, and the Epistle of James in 1843; and in 1848 the entire New Testament, prepared by Rev. Alfred Wright and his associates, was published by the American Bible Society.

Portions of Scripture had been issued at different times by our missionaries to the Dakotas, but the entire Bible was printed in 1879. It is a thorough work, by thorough scholars. Dr. S. R. Riggs and Rev. T. S. Williamson, M.D., devoted themselves to it for many years. But the following account of this work from the *Bible Society Record*, mostly in the language of the venerable surviving translator, tells the story so graphically that, with a few unimportant omissions, it is transferred to these pages. It is headed "The Making of a Bible."[1]

The beginning of missionary work among the Dakotas dates from the year 1834, when two brothers from Connecticut, by the name of Pond, built their cabin on the shore of Lake Calhoun. Dr. Williamson and Mr. Stevens followed the next year, and on the first of June, 1837, after a journey of nearly three months from Massachusetts, the Rev. Stephen R. Riggs and his wife Mary landed from a steamer at the point where the Minnesota empties into the Mississippi, and there entered into the wilderness in which they were to sojourn forty years as the friends and teachers of the Dakota Indians.

Their first business was to master the language, and in this they had the meager aid of a vocabulary of five or six hundred words, which Mr. Stevens had gathered from the brothers Pond. Beyond this they must get their ears opened to catch strange sounds, and their tongues trained to utter them; and the fleeting sound must be presented to the eye and perpetuated by fixed characters upon the written page; since, as Dr. Riggs says, "for the purposes of civilization, and especially of Christianization, we have found culture in the native tongue indispensable." How great the task, we must let our author tell in his own way:

"To learn an unwritten language, and to reduce it to a form that can be seen as well as heard, is confessedly a great work. Hitherto it has seemed to exist only in sound. But it has been, all through the past ages, worked out and up by the forges of human hearts. The human mind may not stamp purity nor even goodness on its language, but it always, I think, stamps it with the

[1] E. W. Gilman, D.D., in *Bible Society Record*, 1880, pp. 145-6; he quotes from *Mary and I*, by Dr. Riggs.

deepest philosophy. So far, at least, language is of divine origin. The unlearned Dakota may not be able to give any definition for a single word that he has been using all his life-time, yet, all the while, in the mental workshop of the people, unconsciously, and very slowly it may be, but also very surely, these words of air are newly coined. No angle can turn up but by-and-by it will be worn off by use. No ungrammatical expression can come in that will not be rejected by the best thinkers and speakers. New words will be coined to meet the mind's wants; and new forms of expression, at first bungling, will be pared down so as to come into harmony with the living language.

"But it was no part of our business to make the language. It was simply to report it faithfully. The system of notation had in the main been settled upon before Mary and I joined the mission. It was, of course, to be phonetic, as nearly as possible. The English alphabet was to be used as far as it could be. These principles controlled the writing of Dakota. In their application it was soon found that only five pure vowel sounds were used. So far the work was easy. Then it was found that x, and v, and r, and g, and j, and f, and c, with their English powers, were not needed. But there were four *clicks* and two *gutturals* and a *nasal* that must in some way be expressed. It was then, even more than now, a matter of pecuniary importance that the language to be printed should require as few new characters as possible. And so n was taken to represent the nasal; q represented one of the clicks; g and r represented the gutturals; and c and j and x were used to represent ch, zh, and sh. The other clicks were represented by marked letters. Since that time some changes have been made; x and r have been discarded. In the grammar and dictionary, which was published fifteen years afterward, an effort was made to make the notation philosophical. The changes which have since been adopted have all been in the line of the dictionary.

"When we had gathered and arranged the words of this language, what had we to put into it for the Dakota people? What will you give me? has always been their cry. We brought to them the gospel of salvation through faith in Jesus Christ, as contained in the Bible. Not only to preach Christ to them, that they might have life, but to engraft his living words into their living thoughts, so that they might grow into his spirit more and more, was the object of our coming. The labor of writing the language was undertaken as a means to a greater end."

A HUMBLE HOME.

After three months spent at Lake Harriet, Mr. Riggs joined Dr. Williamson at Lac-qui-parle, two hundred miles in the interior, where the latter had erected a log-house, a story and a half high. In the upper part were three rooms, the largest of which, ten feet by eighteen, was appropriated to Mr. Riggs and his wife. He says:

"That room we made our home for five winters. There were some hardships about such close quarters, but, all in all, Mary and I never enjoyed five winters better than those spent in that upper room. There our first three children were born. There we worked in acquiring the language. There we received our Dakota visitors. There I wrote and wrote again my ever-growing dictionary. And there, with what help I could obtain, I prepared for the printer the

greater part of the New Testament in the language of the Dakotas. It was a consecrated room."

EARLY ACHIEVEMENTS.

At Lac-qui-parle the missionaries had a stanch friend and interpreter in Mr. Renville, a Christian half-breed and fur trader. "Dr. Williamson and Mr. G. H. Pond had both learned to read French. The former usually talked with Mr. Renville in French, and, in the work of translating, read from the French Bible, verse by verse. Mr. Renville's memory had been specially cultivated by his having been interpreter between the Dakotas and the French. It seldom happened that he needed the verse re-read to him; but it often happened that we, who wrote the Dakota from his lips, needed to have it repeated, in order to get it exactly and fully. When the verse was finished, the Dakota was read by one of the company. We were all only beginners in writing the language, and I more than the others. Sometimes Mr. Renville showed, by the twinkle of his eye, his conscious superiority when he repeated a long and difficult sentence, and found that we had forgotten the beginning. By this process, during that first winter at Lac-qui-parle, a pretty good translation of the Gospel of Mark was completed, besides some fugitive chapters from other parts. In the two following winters the Gospel of John was translated in the same way.

"Besides giving these portions of the Word of God to the Dakotas sooner than it could have been done by the missionaries alone, these translations were invaluable to us as a means of studying the structure of the language, and as determining, in advance of our own efforts in this line, the molds of many new ideas which the Word contains. In after years we always felt safe in referring to Mr. Renville as authority in regard to the form of a Dakota expression.

SOME PECULIARITIES OF THE LANGUAGE.

"The language of counting in Dakota was limited. The 'wancha, nonpa, yamne' — one, two, three — up to ten, every child learned, as he bent down his fingers and thumbs until all were gathered into two bunches, and then let them loose. Eleven was *ten more one*, and so on. Twenty was *ten twos* or *twice ten*, and thirty, *ten threes*. With each ten the fingers were all bent down, and one was kept down to remember the ten. Thus, when ten tens were reached, the whole of the two hands was bent down, each finger meaning ten. This was the perfected 'bending down.' It was opawinge — one hundred. Then, when the hands were both bent down for hundreds, the climax was supposed to be reached, which could only be expressed by 'again also bending down.' When something larger than this was reached, it was a *great count* — something which they nor we can comprehend — a million.

"On the other side of *one* the Dakota language is still more defective. Only one word of any definiteness exists — *hankay*, half. We can say hankay-hankay — *the half of a half;* but it does not seem to have been much used. Beyond this there was nothing. A *piece* is a word of uncertain quantity, and is not quite suited to introduce among the certainties of mathematics. Thus the poverty of the language has been a great obstacle in teaching arithmetic; and that poorness of language shows their poverty of thought in the same line."

COLLATERAL WORK.

"A grammar and dictionary of the Dakota language had been growing through all these years. It was in the line of our missionary work. The materials came to us naturally in our acquisition of the language, and we simply arranged them. The work of arrangement involved a good deal of labor, but it brought its reward in the better insight it gave of their forms of thought and expression. Thus, when we had been a year or more in the country, the vocabulary which I had gathered from all sources amounted to about three thousand words.

"From that time onward it continued to increase rapidly, as we were gathering new words. In a couple of years more the whole needed revision and rewriting, when it was found to have more than doubled. So it grew. Mr. S. W. Pond also entered into the work. He gave me the free use of his collections, and he had the free use of mine. This will be sufficient to indicate the way in which the work was carried on. How many dictionaries I made, I cannot now remember. When the collection reached ten thousand words and upward, it began to be quite a chore to make a new copy. By-and-by we had reason to believe that we had gathered pretty much the whole language, and our definitions were measurably correct.

"It was about the beginning of the year 1851 when the question of publication was first discussed. Certain gentlemen in the legislature of Minnesota, and connected with the Historical Society of Minnesota, became interested in the matter. Under the auspices of this society a circular was printed, asking the coöperation of all who were interested in giving the language of the Dakotas to the literary world in a permanent form. The subscription thus started, and headed by such names as Alexander Ramsey, then governor of the Territory, Rev. E. D. Neill, the secretary of the society, H. H. Sibley, H. M. Rice, and Martin McLeod, the chiefs of the fur trade, in the course of the summer amounted to about eight hundred dollars. With this sum pledged, it was considered quite safe to commence the publication. The American Board very cheerfully consented to pay my expenses while carrying the work through the press, besides making a donation to it directly from their treasury.

"From these sources we had $1,000; and with this sum the book might have been published in a cheap form, relying upon after sales to meet any deficiency. But after taking the advice of friends who were interested in the undertaking, it was decided to offer it to the Smithsonian Institution, to be brought out as one of their series of contributions to knowledge. Prof. Joseph Henry at once had it examined by Prof. C. C. Felton and Prof. W. W. Turner. It received their approval, and was ordered to be printed.

"I went to New York City, and was, the next seven months, engaged in getting through the press the grammar and dictionary of the Dakota language.

"Of the various hindrances and delays, and of the burning of the printing office in which the work was in progress, and the loss of quite a number of pages of the book, which had to be again made up, I need not speak. Early in the summer of 1852 the work was done — I believe to the satisfaction of all

parties. It has obtained the commendation of literary men generally, and it was said that for no volume published by the Smithsonian Institution, up to that time, was the demand so great as for that. It is now out of print, and the book can only be bought at fancy prices.

"The question of republication is sometimes talked of; and should that take place, some valuable additions can be made to the sixteen thousand words which it contains. The language itself is growing. Never, probably, in its whole history, has it grown so much in any quarter of a century as it has in the twenty-five years since the dictionary was published. Besides, we have recently been learning more of the Teeton dialect, which is spoken by more than half of the Sioux nation. And as the translation of the Bible has progressed, thoughts and images have been brought in which have given the language an unction and power unknown to it before."

PROGRESS.

The various steps of progress in translating the Bible are not distinctly traced, but the general outline is given as follows:

"Late in the fall of 1839 the Gospel of Mark and some other small portions were ready to be printed, and Dr. Williamson went with his family to Ohio, where he spent the winter. The next printing of portions of the Bible was done in 1842–1843, when Dr. Williamson had completed the book of Genesis. We had now commenced to translate from the Hebrew and Greek. This was continued through all our missionary life. So far as I can remember, there was no arrangement of work between the doctor and myself; but while I commenced the New Testament, and having completed that turned to the Psalms, and, having finished to the end of Malachi, made some steps backward through Job, Esther, Nehemiah, and Ezra, he, commencing with Genesis, closed his work, in the last months of his life, with Second Chronicles, having taken in also the book of Proverbs.

"In the latter part of 1863, Mr. Riggs devoted himself to a revision and completion of the New Testament, and in the following autumn he spent three months in the Bible House, reading the proof of the New Testament. Dr. Williamson had also added a revised Genesis and Proverbs, and the Bible Society began at that time to make electrotype plates of the version.

"The multiplication of Dakota readers during the next few years gave a new impulse to the work of translating the Scriptures, and by 1870 the Psalms, Ecclesiastes, the Song of Solomon, and Isaiah, together with the other four books of Moses, were added to what had been printed five years before. In the summer of 1872 the book of Daniel was translated, and, in the winter that followed, the first copy of the minor Prophets was made.

"The Bible in its complete form, translated, electrotyped, printed, and bound, appeared in the spring of 1879, and not long after, Dr. Williamson, who had contributed so much to its excellence, fell asleep at the age of eighty years.

"These extracts indicate with sufficient fullness the difficulties and the delays incident to the rendering of the entire Bible into a barbarous tongue; but the Book has power to waken thought, to quicken conscience, to convict of

sin, and to manifest the love of God. It is a civilizing and evangelizing power, effectual in building up the kingdom of Christ. The Dakotas are a different people to-day from what they would have been had not Riggs and Williamson given them the Scriptures."[1]

There is one peculiarity of all the versions of Scripture made by our missionaries in the islands of the Pacific. Each one commenced with a Gospel translated and printed for immediate use, and so grew up into the form they now possess. The Gospels of Matthew, Mark, and John, in the Hawaiian language, were printed at Rochester, New York, in 1828; Luke and Acts in 1829, at Honolulu. Other portions followed as they were finished. The New Testament was completed in 1832, and the whole Bible, February 25, 1839, in a volume of fourteen hundred and fifty pages. All these were published at Honolulu. Different revisions have since been issued. The New Testament was printed by the Bible Society, at New York, in 1857, with Hawaiian and English in parallel columns. Quarto and octavo reference Bibles were issued from the same press, and so the Word of God was given to the Hawaiian Islands.

Rev. H. Bingham, Jr., printed the first chapters of Matthew, in 1860, in the language of the Gilbert Islands, and completed the New Testament in 1873, in a 12mo of six hundred and eighty-four pages. A revised edition was issued at Honolulu in 1878 — a priceless gift to thirty thousand people.

The Gospels and Acts were issued for the use of the Marshall Islanders in 1875, though the work was begun in 1861, by Messrs. Doane, Snow, and Whitney. The book of Genesis has also appeared in that language.

Rev. B. G. Snow prepared Mark, John, and the Acts for the natives of Strong's Island in 1869, and the remaining Gospels in 1871.

Rev. L. H. Gulick and Rev. A. A. Sturges gave John to the Caroline Islanders in 1862. Luke and Acts were printed in 1866, Matthew and Mark in 1870, Galatians and Titus in 1873, and Genesis and Exodus in 1875. Other parts of the New Testament are nearly ready for the press.

Rev. R. W. Logan printed in Honolulu, in 1880, the Gospel of Mark for the Mortlock Islands.

The Gospel of Matthew was printed at the same place for the Marquesas Islands, in 1853,[2] and in 1857 Mr. Bicknell went in the "Morning Star" to that port, to superintend the printing of the Gospel of John.[3]

"The Marquesan version of the Gospel of Matthew was prepared by the Rev. James Bicknell, missionary of the Hawaiian Board of Missions, and son of an English missionary to the Society Islands, and printed at Honolulu about 1865, by the Hawaiian Board. The Marquesan language was first reduced to writing by the English missionaries to those islands,[4] early in this century. But the American missionaries from the Sandwich Islands studied the language later with still greater care, some of the results of which I possess in the form of a manuscript grammar and vocabulary; and as you see by my list in Dr. Anderson's volume, they published several works."[5]

[1] *Bible Society Record*, 1880, p. 146. [2] Dr. E. W. Gilman, in *Gospel for all Lands*, October, 1880.
[3] Rev. H. Bingham, Jr., in *Story of the Morning Star*, p. 27.
[4] London Missionary Society. [5] Letter of Rev. Edward W. Gilman, D.D.

A few specimens of some of these versions are here given:

THE LORD'S PRAYER IN HAWAIIAN.

E ko makou Makua iloko o ka lani, e hoanoia kou inoa. E hiki mai kou aupuni; e malamaia kou makemake ma ka honua nei, e like me ia i malamaia ma ka lani la: e haawi mai ia makou i keia la i ai na makou no neia la; e kala mai hoi ia makou i ka makou lawehala ana, me makou e kala nei i ka poe i lawehala i ka makou. Mai hookuu oe ia makou i ka hoowalewaleia mai; e hoopakele no nae ia makou i ka ino; no ka mea, nouke aupuni, a me ka mana, a me ka hoonaniia, a mau loa aku. Amene.

IN MARQUESAN.

E to matoa Matua iuna i te aki, ia hamitaiia to oe inoa: Ia tuku mai to oe basileia; Ia hakaokohia to oe makemake i te henua nei me ia i hakaokoia i te aki iuna; a tuku mai i te kaikai no matou i te nei mau a. A haka oe i ta matou pio, me matou e haka aku i ta telahi pio ia matou nei: auwe oe tilii ia matou ia oohia matou i te pio: A hoopahue ia matou ko oe te basileia e ta mana e ta hanohano i te mau pokoehu atoa kakoe e pato. Amene.

IN THE GILBERT ISLAND LANGUAGE.

Tamara are i karawa, e na tabuaki aram. E na roko ueam: E na tauaki am taeka i aon te aba n ai aron tauana i karawa. Ko na ańanira karara ae ti a tau iai n te boń aei. Ao ko na kabara ara buakaka mairoura n ai arora ńkai ti kabara te buakaka mairouia akana ioawa nako ira. Ao tai kairira nakon te kaririaki, ma ko na kamaiuira man te buakaka; ba ambai te uea, ao te maka, ao te neboaki, n aki toki. Amene.

IN THE MARSHALL ISLAND LANGUAGE.

Jememuij i l*on*, en kwojarjar et*o*m. En itok am ail*in*. Jen k*o*m*o*nm*o*n ankil am i l*o*l enw*o*t dri l*on*. Ranin, letok *no*n kim kijim ranin: Im jolok amuij jerawiwi, enwot kimuij jolok an armij jerawiwi jen kim. Im jab tellok *no*n mon, ak drebij kim jen nana. Bwe am ail*in*, im kajur, im wijtak in drio. Amen.

IN THE KUSAIEAN LANGUAGE.

Papa tumus *s*u in kosao, *E*'los oal payi. Togusaï lalos tuku. Orek ma nu fwalu, ou elos oru in kosao. Kite kit len si i*n*i ma kut m*o*n*o* misi*n*i: *A* nunok munas nu *s*es ke ma koluk las, oanu kut nunok munas sin met orek ma koluk nu *s*es. *A* tiu kol kit kut in mel, *a* es kit la liki ma koluk, tu togusaï lalos, *a* ku, *a* mwolanu, ma patpat. Amen.

A few portions of the Bible were translated by Papal missionaries in China, but no approach to an entire version. In 1307 Pope Clement V made John de Monte Corvino archbishop of Cambalu,[1] and he translated the New Testament and the Psalms into the language of the Mogul Tartars. It is with great pleasure that the writer records this exception to the general custom of Papal missionaries.[2] Neander says: "This distinguished man, displaying the

耶穌登山寶訓

耶穌看見這許多人、就上山坐下、門徒進前來、耶穌開口教訓他們說、虛心的人是有福的、因爲天國就是他們的國。哀慟的人是有福的、因爲他們必要受安慰。柔和的人是有福的、因爲他們必要得地土。羨慕仁義、如饑如渴的人是有福的、因爲他們必要得飽。憐恤人的人是有福的、因爲他們必要蒙憐恤。清心的人是有福的、因爲他們必要得見天主。勸人和睦的人是有福的、因爲他們必要稱爲天主的兒子。爲義受逼迫的人是有福的、因爲天國就是他們的國。人若因爲我辱罵你們、逼迫你們、造各樣惡言毀謗你們、你們就有福了。應當歡喜快樂、因爲你們在天上的賞賜是大的、在你們以前的先知、也是這樣被人逼迫。○你們是世上的鹽、鹽若失了味、如何能

登山寶訓

MATTHEW V: 1–13.

wisdom of a genuine missionary, spared no pains in giving the Word of God to the people in their own language, in encouraging education, and training up missionaries from among the people."[3]

Matthew v: 1–13 is here given in the Mandarin colloquial dialect, as a specimen of the Bible in Chinese.

[1] Peking. [2] *Chinese Repository*, Vol. I, p. 451; Dr. Anderson, in *Missionary Herald*, 1838, p. 295.
[3] *History of the Christian Religion and Church*, Vol. IV, p. 57.

Dr. Morrison made the nucleus of his version a Chinese manuscript translation from the *Vulgate*, found in the British Museum, and written by order of Mr. Hodgson, in 1737–1738. In 1836, a revised edition of the New Testament was prepared by Messrs. W. H. Medhurst, of the London Missionary Society, E. C. Bridgman, of the American Board, C. Gutzlaff, and J. R. Morrison. The version called the *Delegates' Bible* was published in 1855. Dr. E. C. Bridgman was one of four who prepared the New Testament of that version. The Bridgman and Culbertson version, prepared by those missionaries, appeared in 1859. On this Dr. Bridgman spent thirty-two years of his missionary life, and Dr. Culbertson finished it after Dr. Bridgman's death.[1]

Different editions were published in 1861, 1863, and 1865, and the translation was regarded by the Russian archimandrite at Peking, himself a translator, as the best that he had seen. All these are in the Wen Li, the classical or written language. Besides this are what some call dialects, but which are hardly more so than the Italian, French, and Spanish languages are dialects. The Mandarin colloquial, so called because used by the Mandarins throughout the empire, and in court circles at Peking, is called Kwan Wha, and is the spoken language north of the great Yangtse Kiang[2] River. Perhaps two hundred millions have some knowledge of this, and steam and electricity promise to make it *the* Chinese language. The Bible was translated into it, and completed in 1874, by a committee of five, of which Rev. H. Blodgett, D.D., was an active member. The Old Testament was translated by Dr. Schereschewsky, of the American Episcopal Mission.

The other dialects differ so much from each other that interpreters are needed between them, and foreigners sometimes thus mediate between Chinese. The Shanghai and Fuhchau colloquials are spoken by about eight millions each, and that of Canton is one of the principal languages of the empire. The colloquial of Ningpo is spoken by about five millions.[3]

There was, also, a New Testament printed in the book language at Ningpo, in 1853; in the Fuhchau dialect, 1863, and 1866; in the Ningpo dialect, with Romanized letters, in 1868; Hong Kong dialect, 1870; Shanghai dialect, 1872; Amoy dialect, 1873; and another in Ningpo Romanized, 1874.

A version of the whole Bible is now being prepared in the Shanghai dialect, and another in the Fuhchau dialect is also approaching completion, on which several of our missionaries have bestowed much labor. Rev. L. B. Peet translated and published the New Testament at his own expense, in 1863. It reached the fourth edition. Another version of the New Testament, by Dr. C. C. Baldwin and C. Hartwell, aided by Dr. Maclay and O. Gibson, appeared in 1866, and a revised edition in 1875.

These later versions are a great advance on those of Marshman and Morrison, but yet the work of translating the Bible in China is not complete. To say nothing of unfinished versions, scholars are not yet agreed on the terms wherewith to render in Chinese our words Jehovah, God, and Spirit. Still, the publications of our North China mission reach two thirds of the entire population of the empire.

[1] *Bible Society Record*, 1880, pp. 81–84. [2] Son of the great water. [3] *Bible Society Record*, 1876, p. 147.

The following tabular statement, prepared by Rev. L. H. Gulick, M.D., formerly a missionary of the American Board, and showing the debt which China owes to so many devoted missionaries, is taken from the *Annual Report* of the American Bible Society for 1880, pp. 114–115:

Date of First Publication.	*Dialect.*	*Books.*	*Translators.*
1859	Classical	Bible	Rev. E. C. Bridgman and Rev. M. S. Culbertson.
1874	Mandarin	Old Testament	Rev. S. I. J. Schereschewsky, D.D.
1872	"	New Testament	Committee, consisting of Rev. J. S. Burdon, D.D., Rev. H. Blodgett, D.D., Dr. Schereschewsky, Rev. J. Edkins, Rev. W. A. P. Martin, D.D.
1872	Shanghai Coll.	"	Rt. Rev. W. J. Boone, Revs. J. S. Roberts, E. H. Thompson, J. M. W. Farnham, D.D.
1880		The Gospels	Rev. by committee of Revs. J. M. W. Farnham, D.D., E. H. Thompson, and J. W. Lambuth.
1880	Ningpo Coll.	New Testament	Rt. Rev. W. A. Russell, Revs. H. V. Rankin, W. A. P. Martin, D.D., W. T. Morrison, and others. Revised, 1868, by Revs. F. F. Gough and J. H. Taylor. Again revised, 1879, by Rev. F. F. Gough.
1871	"	Genesis and Exodus	Rev. H. V. Rankin.
1879	"	Isaiah	Rev. E. C. Lord, D.D.
1866	Fuhchau Coll.	Matthew	Rev. R. S. Maclay, D.D.
"	"	Mark	Rev. O. Gibson.
"	"	Luke	Rev. C. C. Baldwin, D.D.
"	"	John	Rev. C. Hartwell.
"	"	Acts	Revs. Gibson and Hartwell.
"	"	Romans	Dr. R. S. Maclay, D.D.
"	"	1st and 2d Cor. and Gal.	Rev. O. Gibson.
"	"	Eph., Phil., Col., 1st and 2d Thess., Tim., and Titus.	Rev. C. Hartwell.
"	"	Hebrews	Rev. R. S. Maclay, D.D.
"	"	James to Revelation	Rev. C. C. Baldwin, D.D.
1875	"	Genesis	Rev. C. C. Baldwin, D.D.
1876	"	Exodus	
1878	"	Leviticus, Numbers	
1878	"	Deuteronomy	
1875	"	Joshua	Rev. J. R. Wolfe.
1878	"	Judges	Dr. C. C. Baldwin.
1875	"	Ruth, 1 Samuel	Rev. S. F. Woodin.
1878	"	2 Samuel	
1879	"	1 Kings	
1880	"	2 Kings	
1879	"	Ezra, Neh., Esther	Dr. C. C. Baldwin.
1866	"	Job	Dr. R. S. Maclay, D.D.
1867	"	Psalms	Revs. L. B. Peet, S. F. Woodin.
1866	"	Proverbs	Rev. S. L. Baldwin, D.D.
1880	"	Ecc. and Song of Sol.	Dr. C. C. Baldwin.
1866	"	Daniel	Dr. C. C. Baldwin.
1873	Amoy Coll.	Psalms	Rev. J. Stronach.
1872	"	Matthew	Rev. J. V. N. Talmage, D.D.
1863	"	Mark	Rev. A. Ostrom.
1868	"	Luke	Rev. J. V. N. Talmage, D.D.
1871	"	John	Rev. E. Doty.
1867	"	Acts	Rev. J. Stronach.
1871	"	Gal., Eph., Phil., Col.	Rev. J. V. N. Talmage, D.D.
1868	"	1st and 2d Peter	Rev. J. Stronach.
1869	"	Epistles of John	Rev. J. V. N. Talmage, D.D.
1868	"	The Revelation	Rev. J. Stronach.
1879	Swatow Coll.	Genesis	Rev. William Ashmore, D.D., and Miss A. M. Fielde
1872–3	Canton Coll.	Matthew, Mark, Luke	Rev. G. Piercy.
1872–3	"	John, Acts	Rev. C. F. Preston.

In Japan, though it is too soon to look for a complete translation of the whole Bible, the work has been well begun. As far back as 1837–1839, Rev. Charles Gutzlaff and Dr. S. Wells Williams improved their acquaintance with some shipwrecked Japanese in Macao, in making a beginning. The former translated the Gospel of John, which was printed at Singapore in 1838, in the Katakana character, at the press of the American Board. The latter translated Genesis and Matthew, but they were never printed. He sent the manuscripts to Rev. S. R. Brown, D.D., in Japan, but they were burnt with his house in 1867. Rev. B. J. Bettleheim, M.D., translated the New Testament into the dialect of the Lewchew Islands. He printed one of the Gospels at Hong Kong; afterwards the British and Foreign Bible Society printed Luke, John, and Acts, at Vienna, in 1872. The first part of the Bible printed in Japan was Mr. Goble's version of Matthew, in 1871. Dr. J. C. Hepburn, with the aid of Mr. Okuno, a native Christian, had translated the four Gospels previous to 1870, and published Mark and John in the autumn of 1872, and Matthew in the spring of 1873. The American Presbyterian, Episcopal, Baptist, and Reformed Missions, together with that of the American Board, united to form a committee of one from each mission, for the translation of the Scriptures into Japanese, which began its work in June, 1874, and finished the translation and revision of the New Testament November 3, 1879. Dr. S. R. Brown, of the Reformed Mission, was chairman of the committee; J. C. Hepburn, M.D., LL.D., represented the Presbyterians; Dr. R. S. Maclay the Methodists; and Dr. D. C. Greene the American Board. The Gospel of Luke was printed in August, 1875; the Epistle to the Romans in March, 1876; Hebrews and Matthew,[1] January, 1877; Mark,[2] April, 1877; Epistles of John, June, 1877; Acts, September, 1877; Galatians, January, 1878; Gospel of John,[3] May, 1878; 1 Corinthians, August, 1878; 2 Corinthians, September, 1878; Ephesians, Philippians, and 1 and 2 Thessalonians, June, 1879; and Philemon, James, 1 and 2 Peter, Jude, Colossians, and Revelation, April, 1880. So that the New Testament appears under the sanction of a committee representing most of the Protestant missionaries in Japan.

In a country where Chinese literature has had such an influence on the language, it was difficult to know in what literary style the translation would be most useful; but the translators avoided on the one hand the quasi-Chinese style, intelligible only to the highly educated, and on the other hand the vulgar colloquial, which would make the work contemptible, and chose a style which, while respected by the *literati*, was intelligible to all — a pure, classical Japanese style; and the result shows the wisdom of their choice.

No foreigner could make an idiomatic translation without the aid of a native scholar, and Mr. Okuno, Mr. Takahashi, Mr. Miwa, and Mr. Matsuyama were the native assistants in the work. The first had more to do than the others in the first work of translation till other duties obliged him to leave; and whatever value there is in the text is mainly owing to the scholarly ability of the last, his perfect knowledge of his own language, and his conscientious care. Dr. Hepburn and he led the committee in thanksgiving to God at the conclu-

[1] Revised. [2] Revised. [3] Revised.

sion of their labors on the New Testament. Dr. N. Brown also made a version for the Baptists, having done a like work before in Assam, and published it some months previous to the version of the committee. The Old Testament will, doubtless, be rendered into Japanese as soon as possible. Dr. Greene in 1879 prepared Bridgman and Culbertson's Chinese New Testament for use in Japan,[1] the same as the Kunten mentioned below.

The American Bible Society has published an edition of the Japanese New Testament, as translated by the committee, in Roman type, prepared under the direction of Dr. Hepburn, who feels, in common with many, that there is imperative need of reform in the mode of writing Japanese. It has been said that ideographic written characters are a great obstacle to progress in China, and the same burden is carried by Japan in her swift advance, for they are used in that empire also. A printer in Yokohama, who had metal type for fifty thousand Chinese characters, still needed to cut three or four new characters every day. A man who knows seven or eight thousand characters will find reading comparatively easy; yet even he will often need the dictionary, unless he is content, like many of the Japanese, to guess at the meaning. Few among the working classes can acquire and retain even two thousand characters. It is safe to say that three fourths of the adult Japanese cannot read the better class of newspaper editorials; and if the more popular papers add phonetic characters to explain the others, this renders their pages distasteful to scholars. There ought, then, to be a phonetic literature for those who have not time to commit to memory so many Chinese characters. Half of the time now vainly spent on the Chinese characters, if given to the study of Roman letters, would make reading a delight to millions who now regard it as an odious task.

(1) 元始有道道偕神

(2) 元始ニ道有リ道ハ神ト偕ニ有リ

(3) 元始に道有り道ハ神と偕み有り

(4) 元始 道有道 はじめにことばありことば 神偕有 かみとともにあり

Besides this edition in Roman type, the same society has published, or is publishing, four other stereotype editions, samples of which are given: (1) is the Kunten. This name is given to the small Japanese phonetic characters written on the right of the Chinese ideographs, to give the termination of Japanese verbs and particles, not found in Chinese. Then certain numerals and arbitrary signs are also placed on the left of the column, to mark the Japanese order of thought. The Chinese classical version of Bridgman and Culbertson is thus translated substantially into Japanese. (2) is the Katakana, for the use of scholars, but not familiar to female readers. (3) is the Hirakana, intended for those more dependent on phonetic helps; and (4) is a tentative edition, in which the Chinese is used, and always in subordination to the

[1] Dr. J. C. Hepburn, in *Bible Society Record*, 1880, pp. 81–84.

Hirakana. It is written on one side of, and not in, the column. The standard edition is printed in the type marked (3).[1]

In India, Messrs. G. Hall and S. Newell commenced a version in Marathi, and the New Testament was issued before Mr. Hall's death, in 1826; a revised edition was printed in 1831, and a second revision, to which Rev. H. Ballantine devoted several years of assiduous labor, appeared in 1845. The Bible followed in 1847, and a thorough revision in 1855. Two years later saw another revision, and in 1858 a New Testament with references — revised again in 1868; for the motto of our missionaries is, "As nearly perfect as possible, and still more perfect."[2] Mr. Ballantine's revision was used for ten years, and was the basis of the standard version now in use; Dr. A. Hazen and others being prominent in its preparation. The Old Testament has also undergone careful revision, so that a most excellent version is now in the hands of the fifteen millions of the Marathi people.

Dr. S. B. Fairbanks furnishes these additional facts: Dr. D. O. Allen translated the books of Samuel previous to 1846, and edited the larger part of the first *complete* edition of the Bible, 1850–1852. Mr. Graves was a careful and exact translator, and gave the best part of his missionary life to that work. He always used a common word if there was one.

Dissatisfied with the New Testament then in use, the Ahmednuggur mission published another translation of the Gospels and Acts. It was the work chiefly of Mr. Ballantine. Then Dr. Hazen took up the work of revision, and edited the Jubilee edition of the Bible,[3] which, with the exception of the minor Epistles, is the one now published by the Bombay Bible Society. Dr. Hazen's edition is nearer the originals than any other, especially in the New Testament.

The Lord's Prayer in Marathi and Gujerati, in two different types, is here given as a specimen of those languages.

The Tamil version is pronounced, by competent judges, one of the best versions to be found in any language. First appearing in 1844, a revised edition was issued in 1850, and on that Drs. M. Winslow and L. Spaulding, both accurate Tamil scholars, spent many years of unremitting toil. Few will ever know how much time and strength was given to this life-work, or how much the increased perfection of different editions was due to untiring effort. The notes left upon it are a valuable legacy to future revisers. Dr. Anderson says that in accuracy, conciseness, elegance, and idiomatic correctness, it is a great advance on anything before it. The Madras Bible Society calls it the standard version. Rev. G. T. Washburne pronounces it truer to the original than our English version. What a boon to the almost fifteen millions of the Tamil people!

The Nestorians had the Bible in the ancient Syriac, but, as modern Syriac is their vernacular, they needed a version in that, also. When the mission was established, that language was not reduced to writing. There were no printed books, and but few manuscripts, in what was, to them, an unintelligible language. The four Gospels were translated into the modern Syriac, and printed in Oroomiah, in 1844, and the whole New Testament, with ancient and modern

[1] Dr. David C. Greene, in *Missionary Herald* for 1881, pp. 28–29.

[2] 1868.

[3] Dr. Anderson's *India*, p. 109–110.

The Lord's Prayer, in Marathi.

हे आमच्या आकाशांतील बापा, तुझें नाम पवित्र मानिलें जावें, तुझें राज्य यावें. जसी आकाशांत तसी पृथ्वीवरहि तुझी इच्छा चालू व्हावी. आमचें प्रतिदिवसाचें अन्न आज आह्मास दे. आणि जसें आह्मी आपल्या ऋण्यांस सोडितों, तसें तूं आमचीं ऋणें आह्मास सोड. आणि आह्मास परीक्षेच्या अवस्थेंत नेऊं नये, परंतु आह्मास दुष्टापासून सोडीव; कारण कीं राज्य, आणि सामर्थ्य, आणि गौरव, हीं सर्वकाळ तुझीं आहेत; आमेन.

The same, in small type.

हे आमच्या आकाशांतील बापा, तुझें नाम पवित्र मानिलें जावें, तुझें राज्य यावें. जसी आकाशांत तसी पृथ्वीवरहि तुझा इच्छा चालू व्हावी. आमचें प्रतिदिवसाचें अन्न आज आह्मास दे. आणि जसें आह्मी आपल्या ऋण्यांस सोडितों, तसें तूं आमचीं ऋणें आह्मास सोड· आणि आह्मास परीक्षेच्या अवस्थेंत नेऊं नये, परंतु आह्मास दुष्टापासून सोडीव; कारण कीं राज्य, आणि सामर्थ्य, आणि गौरव, हीं सर्वकाळ तुझीं आहेत; आमेन.

The Lord's Prayer, in Gujerati.

ઓ આકાશમાંના હમારા બાપ તાહારૂં નામ પવીતર મનાએ* તાહારૂં રાજ આવે જેમ આકાશમાં તેમ પરથવી પર તાહારી ઈછા થાએ* હમારા નીતના રોટલા આજ હમને આપ* ને જેમ હમે હમારા દેવાદારોને માફ કરીએછીએ તેમ તું હમારાં દેવાં હમને માફ કર* ને હમને પરીખશામાં ન લે પણ હમને ભુડાઈથી છોડાવ કેમકે રાજ તથા પરાકરમ તથા મહીમા શરવકાલ શુધી તાહારાં છે * આમીન*

The same, in small type.

ઓ આકાશમાંના હમારા બાપ તાહારૂં નામ પવીતર મનાએ* તાહારૂં રાજ આવે જેમ આકાશમાં તેમ પરથવી પર તાહારી ઈછા થાએ* હમારા નીતના રોટલા આજ હમને આપ* ને જેમ હમે હમારા દેવાદારોને માફ કરીએછીએ તેમ તું હમારાં દેવાં હમને માફ કર* ને હમને પરીખશામાં ન લે પણ હમને ભુડાઈથી છોડાવ કેમકે રાજ તથા પરાકરમ તથા મહીમા શરવકાલ શુધી તાહારાં છે* આમીન*

Syriac in parallel columns, in 1846. Before the close of 1852, the entire Bible had issued from the press. New editions of the New Testament appeared in 1853 and 1854, and in 1860 the Bible with references. Dr. Perkins, who was at the head of the translation of the Scriptures for nearly twenty years, also published a commentary on Genesis, in 1867. In the work of translation he was aided by the revision of the scholarly Stoddard,[1] and the fine taste and linguistic attainments of Rev. A. H. Wright, M.D., who received the formal thanks of the mission for his careful revision of the modern Syriac New Testament, and at the time of his death was at work on a translation of the Bible into the Tartar, or Azerbijan Turkish.

The amiable Stoddard thus writes of the modern Syriac Bible:[2] "That Bible which we clasp so joyfully to our hearts, which is the basis of our heavenly hopes, is now given in simple language to the entire people. It is to visit their rude homes and sit beside them in their daily employment. This is a work which cannot die. We may all pass away, and much that we have done be forgotten; but this Bible will live and preach to young and old, on the plain and in the mountains, and bring forth the fruits of righteousness long after we slumber in the dust. Had the churches of America conferred on the Nestorians no other blessing, this one thing would amply repay their efforts."

LORD'S PRAYER IN KOORMANJIE KURDISH.

Matthew vi:9. Ya bave m*a*, ko tu lu *a*zman*e*, Nave t*a* pakuj bub*a*. 10 Hoonkar*e*t*e*a t*a* be. Hostuna t*a* bub*a*, chawa ko lu *a*zman, oosaje lu s*a*r arde; 11 Nane m*ae* h*a*m*e* rojan *e*ro ju mara bud*a*. 12 Oo daened m*a* ju mara b*a*rd*a*, chawa ko *a*mj*e* b*a*rdudun ju daendared mara. 13 Oo ma m*a*b*a* jarubandune le m*a* ju hurab*ee* azabuka, chuma ko hoondkar*e*t*e*, oo kawat oo az*a*t, ya t*a*ya *a*b*a*d*e*. *A*m*e*n.

Pronunciation. A, as in far; *a*, as in fat; e, as in me; *e*, as in met; *u*, as in fur; o, as in note; and oo, as in moon; *e*a, e*e*, a*e*, *ae*, and *e*e, pronounced separately as eo in meteor, or, as having the mark called diaeresis.

Notes. Bave, the p of our papa, or the b of the Turkish baba, is softened into its correlate v. *A*zman*e* sounds more like Zeman = time, than semaa = heaven, yet the final n must be an addition to the last. Lu seems to be the preposition l' in the sense of in. See v. 10, twice. Nave is our English and German name, Latin nomen, French nom, with the m softened into v.

10. Hoonkaret seems to be related to the Turkish Hoondikar, one of the names in that language for ruler. Ta here, and tu in verse nine, remind us of the Latin tuus, tua, and English thy. Be corresponds to the Hebrew verb boa = to come; and bub*a* may be a form derived from that, in the sense of become. Chawa is the Hebrew, Arabic, and Assyrian kma, with *m* softened into w. Arde is the Arabic ard.

11. Nane seems related to the Hebrew nathan = to give, and the Assyrian

[1] *Missionary Herald*, 1853, p. 208.

[2] *Memoir*, p. 357.

iddin, with the same meaning. Hame is the Hebrew and Arabic yom, Syriac yoma, Assyrian yamu.

12. Oo is the Hebrew, Arabic, Syriac, and Assyrian wa or ve = and. Daened and Daendared remind one of the Arabic Deen or Deenet = a debt, and the Hebrew dan = to judge or condemn. Is b*ard*a bar = righteous, and the causative d?

13. Is hurabee related to the Hebrew and Arabic hharab = destruction, or wasteness, desolation? Kawat is the Arabic koowet; and azat is the Arabic izzat. Abade in Arabic, el abadeh, or, as it reads in this place, "ila el abadeh."

Several small portions of Scripture were also printed in the language of the Kûrds.

The Turkish Bible is already printed in the Armenian character for the Turkish-speaking Armenians, and in the Arabic character for the Turks. The Armenians and the Bulgarians have it also in their own languages. The diversity of language has required a translation of the Bible for each of the leading races. The Arabic is spoken not only in Arabia, but also in Syria, Egypt, and Mesopotamia, and is read by Moslems from western Africa to China, and from central Africa to Tartary. A translation into this language gives the Word of God to one hundred and thirty millions of our race. Oriental churches have tried to do this at different times. About the middle of the eighth century, John, Bishop of Seville, translated the *Vulgate* into Arabic. The four Gospels were printed at Rome in 1591, in a translation from the Greek. In 1616, Erpenius, at Leyden, issued the New Testament, from a version made by a Coptic bishop in the fourteenth century, and in 1662 the Pentateuch, in Hebrew letters, from a translation by an African Jew of the thirteenth century. The first complete Arabic version in Europe was in the *Paris Polyglot*, 1645. This was reprinted in England, by Walton, in his Polyglot, in 1657; but both were very inaccurate. A Bible was printed at Bucharest in 1700, and the Gospels at Aleppo in 1706. In 1727, the Christian Knowledge Society published the New Testament, and the Polyglot edition was reprinted at Newcastle, England, in 1811. But the Propaganda edition of 1671 claims special notice, as it was the only version that, till recently, could be circulated in the East. Undertaken by order of Urban VIII, at the request of some Oriental bishops, forty-six years were consumed in the work; but the result did not justify the time spent on it. The meaning of the Epistles is often made obscure, and their doctrinal statements pointless. Much of the Old Testament is either unmeaning or in bad taste, and the whole is neither classical nor grammatical. It could not be given to an Arabic scholar without an apology, or read in public without previous revision.

When such a version was the best to be had, a new one was needed. Rev. C. Schlienz undertook to supply the need at Malta, with an Arab named Fares for an assistant, but he did not succeed. Dr. E. Smith devoted the last ten years of his life to the work. He procured the best philological helps, both printed and in manuscript, from Europe and the East. The best native

The Lord's Prayer

IN

MODERN SYRIAC.

ܨܠܘܬܐ ܕܡܪܢ.

ܒܒܝ

ܕܒܫܡܝܐ: ܦܝܫ

ܩܘܕܫܐ ܫܡܘܟ: ܐܬܝܐ

ܡܠܟܘܬܘܟ: ܗܘܐ ܪܘܝܘܟ: ܕܟܝ

ܕܒܫܡܝܐ ܐܘܦ ܒܐܪܥܐ. ܗܒܠ ܠܢ ܠܚܡܐ ܕܣܘܢܩܢܢ

ܐܝܕܝܘ ܝܘܡܐ: ܘܫܒܘܩ ܠܢ ܚܘܒܝܢ: ܕܟܝ ܕܐܘܦ ܐܚܢܢ ܫܒܩܠܢ ܠܕܝܢܝܕܪܢ.

ܘܠܐ ܡܐܘܝܕܬ ܠܢ ܠܒܘܪܬܐ: ܐܠܐ ܦܨܝܒ ܠܢ ܡܢ ܒܝܫܐ:

ܩܒܒ ܕܕܝܘܟ ܝܠܐ ܡܠܟܘܬܐ:

ܘܚܝܠܐ: ܘܬܫܒܘܚܬܐ:

ܠܐܒܕ: ܐܒܕܝܢ:

ܐܡܝܢ.

scholars were employed, and in 1848 his preparation was complete. At his death, in 1857, the New Testament and Pentateuch were nearly ready for the press; seven of the minor prophets, and fifty-two chapters of Isaiah; but his standard was so high that he regarded only Genesis and Exodus, with ten chapters of Matthew, as really finished. After his death the work was completed by Rev. Dr. C. V. A. Van Dyck, whom Providence had fitted for the place by his wonderful mastery of the Arabic. The New Testament was published early in 1860, and the whole finished in August, 1864, and printed in March, 1865. So great was the demand for it that ten editions, containing forty thousand copies, appeared that year. The accuracy of its renderings, the idiomatic excellence of the style, and even the beauty of the type, which Dr. Smith had prepared especially for it, and which surpassed all that had gone before as much as the translation excelled all previous effort, made it popular among all classes, so that even the Moslem was forced to commend the Bible of the Christian. The completion of the great work was celebrated with fitting services, amid general rejoicing. No literary work of the century exceeds it in importance, and it is acknowledged to be one of the best translations of the Bible ever made.

As Rev. S. H. Calhoun has beautifully said in one of his letters, just as Syria, once lighted up with the oil made from her own olives, is now illuminated by oil transported from America, so the light of revelation that once burned brightly there, lighting up the whole earth with its radiance, long suffered to go out in darkness, has been rekindled by missionaries from America, in the translation of her own Scriptures into the spoken language of her present inhabitants.[1]

The effect of its distribution was as marvelous as the eagerness to obtain it. It is undermining error on all sides, and vindicating the truth from all misrepresentation wherever it goes. Voweled Testaments go among the Moslems, Bibles enter the convents, and copies go to Liberia on the west and Canton on the east.

Ghubreen, an influential Greek ecclesiastic in Syria, said: "But for the American missionaries the Word of God had well-nigh perished out of the language; but now, through the labors of Eli Smith and Dr. Van Dyck, they have given us a translation so pure, so exact, so clear, and so classical, as to be acceptable to all classes and all sects."[2]

If any wonder why so much pains should be taken to make a version not only accurate but idiomatic, let them read the following words of Luther in 1530: "In translating, I have striven to give pure and clear German, and it has verily happened that we have sought a fortnight, three, four weeks for a single word, and yet it was not always found. In Job we so labored, Philip Melancthon, Aurogallus, and I, that in four days we sometimes barely finished three lines." Again he writes: "We must not ask the Latinizers how to speak German; but we must ask the mother in the house, the children in the lanes,

[1] See *Foreign Missionary*, 1875.

[2] *Annual Report*, 1866, p. 102; *Missionary Herald*, 1860, p. 176.

the common man in the market-place, and read in their mouths how they speak, and translate accordingly. Then they understand, for they see that we are speaking German. Take that word of Christ, Matthew xii:34, *l. c.*, now should I follow the asses? They would thus translate: 'Out of the superabundance of the heart speaks the mouth.' Now tell me, is that spoken German? No German would say that — for 'superabundance of heart' is no German, any more than superabundance of house, superabundance of bench — but thus speaks the mother in the house: 'Whose heart is full, his mouth runs over.' That is Germanly spoken, as I have tried to do, but, alas! not always succeeded."

The following words from the venerable Rev. E. Riggs, D.D., LL.D., of Constantinople, who has stood at his post in Turkey for forty-eight years, are worthy to come after these of the Reformer. In a letter to the writer, dated August 5, 1880, he raises the question, "Why does a missionary require eight or ten years, at least, to complete a translation of the Bible in a foreign language? Let the candid friends of the Bible consider:

"First. The amount of matter comprised in the volume. Let him count the number of words on a page, multiply it by the number of pages, and then compare the amount with that found in ordinary volumes, and he will find that he has in the Bible a library rather than a single volume.

"Second. The conscientious translator cannot give a hasty or superficial rendering, or one in accordance with the views of any commentator, unless, after thorough investigation, he has made them his own. Few form an idea of the work of thoroughly mastering any document in a dead language.

"Third. The translator of the Bible must not only be master of Hebrew, Chaldee, and Greek, but also of the language into which he translates. Is it said he should have this knowledge before he begins? I reply that, however thorough that previous knowledge may be, experience will soon show him that in the field of every language are *terræ incognitæ* which he must explore and map out before he can go on with confidence; *e. g.*, names of trees, plants, animals, and gems may be little regarded by common readers, yet the translator cannot neglect them, and must bestow much labor to form a decided judgment as to the meaning of the original words, and then of the right terms to express that meaning in his translation. So of the orthography of proper names. It would be a blemish if the same name were spelled in four or five different ways; yet this is true of our own justly esteemed English version. To secure the right spelling of proper names, a complete list should be made out and be at hand for reference. The Old Testament contains more than twenty-six hundred such names.

"Fourth. If one knows a foreign language, let him try the experiment of translating the amount of a page in the Bible from that language, or from English into it. Then, after some days, let him carefully revise it, or get another familiar with both languages to look it over with him, so as to secure accuracy. Now let him multiply this by the number of pages in the Bible, and he will know something of the time needed for such a work. Then there is the time required for comparing the different parts, in order to secure consistency in the rendering of the same terms.

Rev. Dr. Goodell

TRANSLATORS OF THE BIBLE AT CONSTANTINOPLE. 1861.

"Fifth. Sometimes the strange language has not been previously used for the expression of Christian ideas. In this case it is hard to set a limit to the labor, investigation, and care needful to secure the right terms for these ideas, and avoid those that would be misleading and injurious."

It may deepen our impression of the greatness and the difficulty of the work of translating the Bible into a foreign language, if we remember that while at the Reformation, and afterwards, learned men in Europe rendered it into their own languages that they had used from childhood, our missionaries are called to transfer it into a language that they never knew till they had reached adult years, and in some cases had not even an alphabet till they gave it one.

Then the very words of a language are so contaminated by heathenism that it is exceedingly difficult to find terms for Christian ideas. The Teloogoo Bible unfortunately employed the word *bali* for sacrifice, and not until after it had been in circulation some time was it discovered that that term denoted "a bloody offering to a malignant deity;" while in the Vedas, *yagna* meant "a sacrifice to a propitious God." It is not necessary to enlarge on the mischief wrought by such a rendering. No one can read the article of Dr. S. W. Williams, on "The Proper Translation of the words 'God' and 'Spirit' into Chinese,"[1] and not be profoundly impressed with the magnitude of some of the difficulties our missionaries meet with in this work.

Then every translator has his own peculiar difficulties. Read Dr. Van Dyck's account of the labor attending his translation of the Old Testament: "In the first place it must be carefully made from the Hebrew; then compared with the Syriac version of the Maronites, and the Septuagint of the Greeks; the various readings given, and in difficult places the Chaldee Targums must be consulted, and hosts of German commentators; so that the eye is constantly glancing from one set of characters to another; then, after the sheet is in type, thirty copies are struck off and sent to scholars in Syria, Egypt, and even Germany. These all come back with notes and suggestions, every one of which must be well weighed. Thus a critic, by one dash of his pen, may cause me a day's labor; and not till all is set right can the sheet be printed."[2]

Rev. D. C. Greene says: "We have been surprised to find that the Gospel of John is one of the most difficult books in the New Testament to render into Japanese. It abounds in passages which, while they seem natural enough in Greek or English, would, translated literally, almost destroy the connection of thought. Even the long involved sentences of Paul are often easier to manage than the seemingly simple statements of John."[3]

And another missionary says: "The Japanese have never cultivated their own language, but spent their time in corrupting the Chinese. No one here reads a Chinese book as it is written. It has to be translated into a mongrel dialect by the reader as he goes, and the Chinese characters shifted about in the sentences to make them intelligible."

Then the want of a native literature increases the difficulty of translation. They have no literary standard by which we may measure the adaptation of

[1] *Bibliotheca Sacra*, Vol. XXXV, pp. 732–778. [2] *Bible Society Record*, 1862, p. 147.
[3] Do., 1878, p. 57.

our work to meet their wants. The best informed among themselves are unable to agree as to what will best suit the people, and much less can we decide for them. An intelligent native, who had devoted himself to the cultivation of his own language, said to a missionary in Yeddo, that he hoped the Bible would supply this need of his countrymen.[1]

The accompanying specimen is the Lord's Prayer in Japanese. The reader will notice that where a Chinese character is used a Japanese one is placed by the side of it, to assist the reader. The Japanese begin at the right hand and read each column from top to bottom. Though this type occupies so much space, the same sounds printed in English letters would occupy only one sixth of it.

Before looking at Dr. Goodell's labors as a translator, it is well to read his own account of the difficulties he encountered. The great work of his life was the translation of the Bible into Armeno-Turkish, or Turkish written in the Armenian character.[2] His attention was called to it on his first arrival in Malta, in 1823, and his final revision was completed in 1863. The printing of the first edition of the New Testament was begun at Malta in 1835, and in November, 1841, the translation of the Old Testament was finished, and printed at Smyrna. A second edition of the New Testament was also printed there in 1843. After he went to Constantinople[3] he tried to carry it on with other missionary work, but accomplished next to nothing. His room must be a study, not a church; his mind, instead of being distracted, needed to be composed, like that of Elisha and the inspired writers whose words he would translate; and his attention strictly confined to this work alone. It was not like giving the Gospel at first to the heathen, where haste is more needed than accuracy, and a more critical examination of difficult passages reserved for the future; but it was giving the Scriptures to a nation that had them in two languages already, though neither tongue was generally understood, and the more learned of the people were more ready to compare, in order to find discrepancies, than to be guided into the truth. In some cases he spent more time on a single passage than he should have employed on a whole chapter, had he been throwing out to a starving population for the first time this bread of heaven. In doing this his feelings often went along with those of the sacred writers, so that, when reading a page alone perhaps for the seventh time, he had to wipe away the tears, or offer up the prayer or praise of which his heart was full. He said that he could almost wish that all the Lord's people were translators, that they might see with their own eyes the very words and style in which God expressed his thoughts to man. God's Word is indeed a great deep. It is divinely beautiful; it is fraught with the riches of eternity.

His helpers, when they learned from him the peculiar idioms of the Greek and Hebrew, insensibly tried to conform their translation to it; so that he

[1] *Bible Society Record*, 1876, pp. 53–54.

[2] Armeno-Turkish and Greco-Turkish require a word of explanation. Many Armenians and Greeks read their own characters, but are not able to read the Arabic letters in which Turkish is usually printed, and perhaps a third of the Armenians have lost the use of their own language, and can speak only Turkish. To accommodate these the Bible is translated into Turkish, but printed in their own characters, with which they are already familiar.

[3] June 9, 1831.

THE LORD'S PRAYER IN JAPANESE, TRANSLATED BY AMERICAN MISSIONARIES.

主の祈禱　馬太傳第六章九節より十三節にいたる

天にましまはれらの父よねがはくは御名をあがめさせたまへ御國をきたらせたまへ聖旨の天になるごとく地にもなさ勢たまへ我ら乃なくてならぬ食を今日もあゑへたまへこれらに罪をかしものをこゝのゆるにごとくわれらごのつみをもゆるしたまへ惡おとにさそはせぬなほあしきより救いごしたまへ國と權能と榮光は爾のかぎりなく有たまふものなれバかなり　アーメン

needed constantly to guard against that tendency, which would have made the work of little use. Then he put parts of it into the hands of men in various positions, to see whether the style was intelligible. Sometimes he did the same with men esteemed as scholars, but carefully, so as not to get the style above the comprehension of the masses. His proof-reading, too, cost him sleepless vigilance; for he found, by dear bought experience, that natives could not be relied on for accuracy; and, after all, he felt that he only approximated the perfection he desired.[1]

In the early part of his work Dr. Goodell was aided by the Armenian Bishop, Dionysius Carabet; and later his most efficient helper was Panayotes Constantinides, with whom he was associated for thirty years. Together they revised the New Testament three times, and the Old Testament once. "We pressed on together," says Dr. Goodell, "returning thanks at the end of every chapter, that we had been brought so far together on our journey; but his strength failed him when yet there was but a little further to go, so he laid himself down, and the angels carried him to his home in heaven." On the day of the completion of the work, he wrote to his old teacher at Andover, John Adams, LL.D., "Thus have I been permitted by the goodness of God to dig a well in this distant land, at which millions may drink; or, as good brother Temple would say, to throw wide open the twelve gates of the new Jerusalem to this immense population."

A version in modern Armenian was issued in several editions, for those Armenians who still use their ancestral tongue. Dr. E. Riggs devoted most of his time to its preparation and revision for seven years, aided at first by Rev. J. B. Adger. Dr. Riggs also prepared a version of the New Testament in ancient Armenian, and in Greco-Turkish. Dr. W. G. Schauffler, aided by Rev. Mr. Farnam, of the London Jews' Society, and Rev. Mr. Schwartz, of Berlin, prepared several editions of the Old Testament in Hebrew-Spanish, printed first at Vienna, and afterwards at Smyrna, for the Jews in Turkey; also an edition in Hebrew-German. After the giving up of the mission to the Jews, he devoted himself to the preparation of a version in the Osmanli-Turkish, which was thoroughly revised by Dr. Riggs, Rev. A. T. Pratt, M.D., until his death, and Rev. G. F. Herrick, aided by a missionary of the Church Missionary Society. In this they had also the coöperation of a native pastor and some learned Moslems, and the result is a standard version in the Turkish language, which it is intended shall supersede the Greco-Turkish and Armeno-Turkish versions, so that the testimony of the Word may be the same in all. That is, it will be printed in Greek letters for Greeks, in Armenian characters for Armenians, and in Arabic letters for Moslems; for the process of assimilation has gone so far among the different races in the Turkish empire, that it is no longer needful to accommodate the different dialects that once existed, caused by the use of different languages; but all can understand the same version, and derive more advantage from the present uniformity of the text, than from former accommodation to their provincialism. The version which thus unifies

[1] See his letter to Rev. S. H. Calhoun, November 6, 1841, in his *Memoir*, pp. 266-272.

the language of the empire was completed May 25, 1878, and the event was celebrated by appropriate religious services. It is now in use.

Previous to this, another very important version was prepared for the Bulgarians in European Turkey. Methodius and Cyril gave the Bible to the Sclavs in their own language one thousand years ago; but the Sclavic is no longer a spoken language. The four Gospels translated by Seraphim, of Eski Zagra, and Sapoonoff, of Trevna, was published at Bucharest in 1828. In 1840 a native version of the New Testament was published, and the Old Testament had been translated by Mr. Constantine Photinoff, at Smyrna, who died just as he was about to revise it with Dr. Riggs. Since then the language itself has undergone a change, conforming more to the Eastern dialect, or Sclavic, which now takes precedence. The need of revision was so manifest that even the government censor encouraged Dr. Riggs to go on. Two Bulgarian scholars, skilled in both the Eastern and Western dialects, were called to his aid, as well as Dr. A. L. Long, of the Methodist mission. Dr. Riggs devoted to this version the most of his time for twelve years; the first edition was printed in an imperial octavo of ten hundred and fifty-four pages, with the references of our English Bible, and at the first annual meeting of the newly organized Bulgarian mission,[1] Dr. Riggs laid on the table the only copy that had come from the bindery in Constantinople.[2]

Now the Bible is sold all over the Turkish empire, and the Bible House at Constantinople is quite as prominent *there* as either the Bible House at New York is *here*, or as the one in London is in Great Britain. The Scriptures are sold there in more than twenty languages, and infuse new life into both literature and religion.[3]

[1] 1871.

[2] *Missionary Herald*, 1872, pp. 76–79.

[3] As an illustration of the extent to which these translations find their way to the people for whose benefit they were made, read the following from the *Annual Report* of the American Bible Society for 1880:

At Constantinople the following editions left the press in 1879:

5,000 copies Imperial 8vo Reference Bible in Turkish (Armenian letter).
1,000 " " " " " " Armenian (from plates).
3,100 " New Testament in Armenian (from plates).
300 " Imperial 8vo Reference Testaments in Turkish (Armenian letter).
2,000 " Psalms in Armenian.
2,000 " Proverbs in Armenian.
1,100 " Psalms in Armenian (Ancient).
1,500 " Proverbs in Turkish (Osmanli).
1,500 " Job " " "

Making a total at Constantinople of 17,500 copies.

At Beirût there were printed:

4,000 Bibles in Arabic.
4,100 Testaments in Arabic.
4,852 Portions in Arabic.

Making a total at Beirût of 12,952 copies.

The entire production of these two centers amounted to 30,452 copies, or 11,304 more than in 1878.

The work of the American Bible Society [*Annual Report* for 1881] in the Turkish Empire has, under the blessing of God, seen from year to year a gradual but most encouraging increase. The following tabulated view of statistics, taken from the reports of 1870, 1875, and 1880, will indicate the progress in each period of five years:

	1870.	1875.	1880.
Books printed	8,000	22,500	35,210
Additions to stock	15,594	24,552	50,080
Circulation	17,554	27,483	40,123
Colporters and booksellers	34	66	129
Receipts from sales	$5,098.60	$8,190.22	$12,727.29

In Africa the Gospel of Matthew, translated into Mpongwe by Rev. W. Walker, was printed at the Gaboon River in 1850. The Gospel of John, translated into the same language by Rev. A. Bushnell, and revised by Dr. J. L. Wilson, was printed in New York by the American Bible Society, in 1852; 12mo, 144 pp. As a specimen of it, John xv: 1–5 is here appended:

EWONJO XV.

Mië nle ogâle rëti, nla Reri yam nle oma o penjavenja wo.

2 Ivare yedu gore mië ny'ayana ilonda, e tomba nyo: nl'ivare yedu nyi jana ilonda, e senga nyo, inle; nyi ga wunie ilonda imienge.

3 Vënâ anuwe re pupu nl'igamba ny'awulini mië'nuwe.

4 Loanlani nla mië, ka mië nla'nuwe. Ga ntaga ivare ny'alënge ngulu yi jana ilonda nyomë, kao nyi doana nl'ogâle: yena re kë anuwe ayana ilonda, kao anuwe doana nla mië.

5 Mië nle ogâli, anuwe nle ampare'. Omedu o doana nla mië, ka mië nla ye, oma më e jana ilond' imienge'; kande aza mië, anuwe lenge ngulu denda mpŏngwâ.

Mr. Walker translated the book of Proverbs into Mpongwe in 1853, but it was not printed till 1859, when it was printed in New York, along with Genesis, Exodus and Acts, under Mr. Walker's supervision. Paul's Epistles appeared at New York in 1867. A third edition of the Gospels, the Epistles of Paul, Ecclesiastes, Song of Songs, Daniel, the minor Prophets, and Isaiah i–xxix appeared in 1879, from the press of the American Bible Society, in New York,[1] and from that edition the Lord's Prayer herewith presented is taken:

Reri yazyo yi re g'orowa, ini nyâ nyi ga loanl' orunda;

2 Inlângâ nyâ nyo ga vie; ntândinli yâ yo ga yanjo go ntye ga nte dendo yo g'orowa.

3 Va zue inya si keka zue nlânlâ winlâ.

4 Nyeza zue inuani sazyo, ga nte nyeza zue mëngi wi nuana zue.

5. Aroanla zue gw'isyârio, ndo romba zue avila gw'ibe. Kânde ipanginla, nli ngulu, nl'ivenda iyâ egombe zodu. Amën.

Matthew and a few of the Psalms were prepared by Mr. Preston in the Dikëlë language, and the Gospel of John was printed in New York in 1879.

The American Bible Society issued from its press in New York, in the Benga language, Matthew in 1858, Mark in 1861, Luke and Genesis in 1863,

[1] Letter of E. W. Gilman, D.D.

and John and Acts in 1864, and a new edition of the Gospels and Acts in 1881.

Mr. Preston wrote in January, 1865,[1] "I know nothing of printing except what I have taught myself here in Africa,"—and for tools he had only an old hand press and ink balls; but the Gospel of Luke had been printed and sent to New York to be bound; Mark had been revised and printed; and the Psalms translated by Mr. Walker had been printed as far as Psalms lxv : 10. In what language this work was done he does not say.

The Gospel of John was translated into the language of the Zulus in 1860, and printed in 1861. The New Testament appeared in 1865, at Natal, a second edition in 1872, and a third in 1879; the two books of Kings, Ezra, Daniel, and the minor prophets in 1868–1869. The report of the Bible Society for 1880 states that the whole Bible in the Zulu tongue will soon be complete.

LORD'S PRAYER IN ZULU.

Father our who (art) in heaven, Let it be hallowed name thy,
Ubaba wetu o s'ezuluini, Ma li dunyisue igama lako,
Kingdom thy let it come, Will thy let it be done on earth
umbuso wako ma u ze, Intando yako ma y'enziwe emhlabeni
here as in heaven, Us give to-day bread daily our,
apa jenga s'ezuluini, Si pe namhla isinkua semihla setu,
Us forgive sins our, like as we them forgive those
Si yekele izono zetu, jengokuba tina si ba yekela bona
who sin against us, Thou not us lead into temptation,
abonayo ku ti, U nga si zisi eku-lingueni,
but us deliver from evil, For kingdom it is thine,
kodua si kulule eku-oneni, Gokuba umbuso u ngo wako
and power it is thine, and glory it is thine, forever, Amen.
n'amanhla a nga ako, nobukosi bu ngo bako, kubengunapakade.
Amen.[2]

As a specimen of the changes that have to be made in the first tentative translation of Scripture after missionaries become more thoroughly acquainted with the language, the version of the same prayer, from the second edition printed at Natal, in 1872, is here subjoined:

1 Baba wetu o sezulwini, Ma li hlonitywe igama lako; 2 Umbuso wako ma u ze; Intando yako ma yenziwe emhlabeni njenga sezulwini; 3 U si pe nahmla ukudhla kwetu okwaneleyo; 4 U si tetelele amacala etu njengokuba si ba tete-lela aba namacala kiti; 5 U nga si ngenisi ekuli-ngweni, kodwa u si sindise koku-bi; 6 ngokuba umbuso u ngowako namandhla, nobukosi, ku ze ku be pakade. Ameni.

[1] *Annual Report of American Board*, 1865, p. 59.
[2] Rev. James C. Bryant, in *Journal of the American Oriental Society*, Vol. I, pp. 393–394.

Since this chapter was stereotyped, a page of the new Ponapean (or Caroline Islands) version has come to hand, which is here subjoined:

MONIN PAN MATU RONAMAU.

[MATTHEW I: 1–6, 9–18, EDITION OF 1881.]

Puk en uatauatak apena ti kan me tapia ta Jijoj Kraij me nain Tepit, me nain Epream.

2 Epream me uia ta Aijak; Aijak me uia ta Jekop; o Jekop me uia ta Jutaj o ri a kan;

3 Jutaj me uia ta Parej o Jara nain Temar; Parej me uia ta Ejrom; Ejrom me uia ta Aram;

4 Aram me uia ta Aminatap; Aminatap me uia ta Naajon; Naajon me uia ta Jalmon;

5 Jalmon me uia ta Poaj; nain Rekap; Poaj me uia ta Opet me nain Rut; Opet me uia ta Jeji;

6 Jeji me uia ta Tepit me Nanmaraki; Tepit Nanmaraki me uia ta Jolomon, me nain li oti en Uraioj.

9 Ojaia me uia ta Jotam; Jotam me uia ta Eaj; Eaj me uia ta Ejikaia;

10 Ejikaia me uia ta Manaja; Manaja me uia ta Emon; Emon me uia ta Jojaia;

11 Jojaia me uia ta Jekonaia o ri a kan, nin tokan ar jalia ue o*n* Papilon;

12 Irail jalia ue o*n* Papilon, muri, Jekonaia me uia ta Jaletiel; Jaletiel me uia ta Joropepel;

13 Joropepel me uia ta Apaiot; Apaiot me uia ta Elaiakim; Elaiakim me uia ta Ejor;

14 Ejor me uia ta Jetok; Jetok me uia ta Ekim; Ekim me uia ta Eliot;

15 Eliot me uia ta Elieja; Elieja me uia ta Matan; Matan me uia ta Jekop;

16 Jekop me uia ta Jojep, me likont aoki la Meri, me naitika ta Jijoj, me mmaranaki, Kraij.

17 Ti kan jo*n* Epream lel Tepit me ek paiu, A jo*n* Tepit lel ar jalia ue o*n* Papilon me ek paiu, A jo*n* ar jalia ue o*n* Papilon lel Kraij me ti ek paiu.

18 Nan iet tuen Jijoj Kraij a ipui tar: In a Meri me kijinnin io*n* Jojep, ni ara kaik ata ko pena, a lijean aki tar *N*en Jaraui

The following article, written for the Presbyterian Board by the late Mrs. S. Wells Williams, who spent a number of years with her husband in China, has just come to hand; and as it is among the last things, if not the very last, that came from her pen, it is here condensed as a postscript to this chapter, though some of the facts have already been narrated:

The preparation of an accurate version of the Bible in the Chinese language has engaged the attention of many missionaries since a very early period. The translations of the Nestorians, during their residence in China for nearly eight hundred years, have not reached us; but it is unwise to infer that they did nothing in this direction, for how else could they have taught the messages of their God and Saviour to a literary people. The Roman Catholics, who came to China about three hundred years ago, have had many learned and earnest men in their missions, some of whom have turned their attention to a translation of the Bible. The portions which are found in their Missals were translated soon after gathering congregations; and as early as 1636, one of them published a careful version, with comments, of all the portions read on Sundays and feast-days. Others of them prepared similar treatises for their converts; but, though often proposed, none of the hundreds of their missionaries in China have ever put into the hands of their disciples a complete version of the Bible. One is said to have been made about 1700. The New Testament was used in Ripa's College at Naples a hundred years ago, where young Chinese were educated for the priesthood. A number of manuscript copies of this or other versions are probably extant, but no encouragement is ever given to printing and distributing the Word of God among the thousands of native Catholics in China.

The circulation of the Scriptures by Protestants has, however, excited the opposition of the Roman Catholic Bishops, who have issued their orders to the faithful not to read, keep, or lend such publications, but to burn them immediately. Still, copies are constantly coming into the hands of their people.

The following extract from the British and Foreign Bible Society's *Report* for 1805 shows the first steps taken in regard to Protestant versions: "Having been informed that a manuscript version of the New Testament in Chinese was deposited in the British Museum, your Committee were led to hope that it might afford the means of introducing divine truth into the Chinese empire. They sought, therefore, to procure from gentlemen conversant with the Chinese language, the most accurate information respecting the manuscript." They also applied to Sir George Staunton for his opinion on the practicability of circulating the Scriptures in China, as well as the proper channel through which it should be attempted, and came to the following results: First, that the manuscript contained a harmony of the four Evangelists, the Acts of the Apostles, and the Epistles, as far as that to the Hebrews. Secondly, that although the translation may be considered accurate, and of elegance superior to any known Chinese translation from European languages, it appears to have been made from the *Vulgate*, under the direction of the Jesuits; and, thirdly, that the expense of printing five thousand copies would exceed six thousand pounds. Considering all the circumstances, therefore, the "Committee determined not to print the manuscript."

In the second report of the Bible Society, in 1806, they state: "That a commencement has been made at Serampore, in translating the Scriptures into the Chinese language, with advantages unattainable in this country." This was undertaken by Dr. Marshman and his son, with the assistance of Mr. Lassar, an Armenian, who had studied Chinese at Macao. These gentlemen labored earnestly to accomplish the good work under great difficulties. At first the printing was all done from blocks, but in 1812 Cary, Marshman, and Ward, say, in a letter to the Bible Society: "We are revising a third time the Gospel of John in Chinese, with a view to having it printed with movable metallic types, by which we believe we shall excel the Chinese themselves in beauty of printing, while the expense will be reduced almost beyond belief." By the labor of Dr. Marshman principally, aided by competent Chinese assistants, the whole Bible was completed in 1820, and printed in 1822, at Serampore. This, which was the first known version of the Scriptures in Chinese, must rank as not the least among the multifarious labors of the devoted and scholarly Marshman, sixteen years having been spent in its production. The version is rude and unidiomatic, as most first versions in Oriental languages necessarily are; but it has, doubtless, been useful in promoting the great object of missions.

Soon after this translation was commenced, the London Missionary Society determined to open a mission in China, and appointed R. Morrison as their first missionary, in 1804. The manuscript spoken of above was put into his hands, and with the assistance of Yung Sam-tak, a Chinese then in London, he transcribed the whole. This formed the basis of his future work. So little favor did this mission receive from the East India Company, that Morrison was refused a passage in their ships, and had to proceed to New York, whence he arrived in Canton September 4, 1807. From that time he set himself to complete his translation. Many of the gentlemen of the East India Company at Canton looked with jealousy on the work, while others were favorable. The remarks of Mr. Robarts, its chief, on his death-bed, are worthy of the representative of a Christian nation: "I see not why your translating the Sacred Scriptures into the Chinese language might not be avowed if occasion called for it; we could with reason answer the Chinese thus: This volume we deem the best of books; Mr. Morrison happened to be able and willing to render it into your language, that it may be accessible to you; your approval or disapproval rests entirely with yourselves; we conceive he has done a good work."

Dr. Morrison toiled single-handed till the summer of 1813, when Rev. W. Milne arrived. The two friends continued the work of translating the Bible, each taking separate books, and the whole passing through the revising hand of Morrison. Their work was finished in 1823, but before it was published, Dr. Milne died, in June.

Next year the work was printed, two years after Dr. Marshman's. It was the result of seventeen years of close application and prayer. Though Dr. Morrison never gave it out as a perfect translation, we cannot too highly value the efforts of these two men; and while it cannot rank high among the literary productions of the empire, it is faithful, and we have reason to believe has been instrumental in shedding the light of divine truth on the minds of many readers.

About the year 1826, Dr. Morrison, impressed with the importance of its thorough revision, entered into a correspondence with Rev. W. H. Medhurst, who had been about ten years in the Chinese mission, and asked him to join in a new translation. Dr. Medhurst, doubting his own proficiency at that time, and feeling that Dr. Morrison was the fittest person for the work, gave up all idea of it. Still, the deficiencies in the style, and obscurities in the meaning of the translation, led the missionaries to urge a revision. Its importance Dr. Morrison fully concurred in, and it had been already arranged that his son should undertake the revision, and the American Bible Society had made provision for sustaining the son in the undertaking, when the death of his father disarranged the plan.

Soon after this, a new translation was made by Mr. Medhurst, Mr. Gutzlaff, and Mr. E. C. Bridgman, who completed the New Testament by the end of 1835. It was the only version used by the Protestant missionaries for the next ten or twelve years.

By the treaty of Nanking, in 1842, five ports were opened to foreign residents, and the island of Hong Kong was ceded to Great Britain. Most of the missionaries who had before resided in the outlying stations removed to the newly opened ports. Shortly after, at a conference held in Hong Kong by all the missionaries of the three denominations then in the field, it was resolved to attempt a new version. Four societies were represented, one English, two American, and one local. The result of six meetings was the allotment of the New Testament, in five portions, to the different missionaries at their respective ports, subject to a final revision in concert. A general committee of delegates met at the house of Dr. Medhurst, in Shanghai, in June, 1847. The work was continued, with some interruptions, till July, 1850, when the New Testament was completed. It was soon after printed with the imprimatur of the five delegates — Boone, Medhurst, Bridgman, W. C. Milne, and J. Stronach. This admirable translation, known as the Delegates' Version, was in the classical style, and has since been extensively circulated.

Soon after this, a revision of the Old Testament was commenced, but, owing to a division among the members, the committee separated, and the result was two versions. One, carried through by the English missionaries, Messrs. Medhurst, Milne, and Stronach, was uniform in style with the Delegates' Version. The other was issued about the same time (1862), by Drs. Bridgman and Culbertson, American missionaries. It made the fourth translation of the Bible

into the Chinese language; a fifth had been previously made and printed by Mr. Gutzlaff, who circulated it mostly in the province of Kwangtung. Dr. Marshman's translation had been chiefly used by the Baptist missionaries in China. It was revised, however, by the Rev. Josiah Goddard. The New Testament was completed and printed by him in 1853. The following year he died at Ningpo, and the translation of the Old Testament has since been carried on by Dr. Dean, of Bangkok.

A committee was engaged for six years on a version of the New Testament in the colloquial language called the Mandarin dialect. This was published in 1872. The Old Testament, in the same dialect, was translated by Mr. (now Bishop) Schereschewsky, of the American Episcopal Church, and published in 1874; it made the last of six complete versions of the Bible which have been made into the Chinese language. Its general acceptance is proved by the great number purchased by the people. In style, idiom, and diffusiveness of expression, it approaches the spoken language more than the Delegates' Version, and is, therefore, more easily understood by the common people, who have only an imperfect knowledge of the higher style of their own literature.

In addition to these versions, the missionaries in the southeastern provinces of Kwangtung, Fuhken, and Chehkiang, have prepared other translations in the local dialects. At Ningpo and Amoy, these translations have been written in what is known as Romanized characters; at Shanghai, Fuhchau, Swatow and Canton, the Chinese characters have been used, and the copies widely circulated. These translations are quite a novelty in the native literature, for the cultivated scholars never think of writing a book in the *bu-pah* or *pah-wa*, the patois of a place; hardly a specimen of such compositions existed in all these six dialects when the versions of the New Testament appeared. There is now no legal hindrance to the circulation of God's Word throughout the eighteen provinces of China, and in all of them copies now come into the hands of persons of every class.

XV.

RELIGIOUS BELIEFS.

MISSIONARIES have unusual facilities for learning the religious beliefs of the people among whom they labor, and we give a brief compend of papers written by several of them on this subject. The first is an account of the religious ideas of the Dakotas, by Rev. A. L. Riggs.[1]

The essence of a Dakota's religion is demon worship. His faith rests not so much in his gods as in a mysterious something embodied in them, which he calls Wakan. This word represents all mystery, occult power, and Deity. To him all life is Wakan, whether active as the winds and running waters, or passive as the boulder rock. He is oppressed by the feeling that while all about him is beyond his control, or even comprehension, he himself is exposed to all evil. All nature, streams, lakes, hills, forests, and plains are to him full of awful mystery. The heavenly bodies look down on him in silent awfulness. The game which he pursues, to-day eludes him with a *quasi* human cunning, and to-morrow seems bereft of instinct; so he regards with awe even the dead beast that lies before him. He sees one man struck down suddenly, and another die of lingering decay, and again he feels the power of the Wakan. To him heaven and earth are full of malignant, warring demons, and he is a slave to the Wakan. The following are the principal gods of the Dakotas:

First. The Oon-ktay-he,[2] representing the most powerful vital force, having the forms of oxen, whose horns and tails — the organs of their power — reach the skies. Like all their gods, these are male and female, the male dwelling in the water, and the female in the earth; so when the Dakota seems to worship earth and water he really worships these. One of them, he believes, dwells under the falls of St. Anthony, in a den of vast extent.

Second. The Wa-ke-yan.[3] These are monster birds; the lightnings are the movements of their wings, and the thunders their voice. Of these there are two sexes and four varieties — one blue and spherical in form, with neither eyes nor ears; lines of lightning form their eyebrows, and from under them shoot downward chains of fire. The palace of these gods is on the top of a high mountain, its gates open to the four points of the compass. A butterfly sentinels the eastern entrance, a bear the western; a reindeer guards the north,

[1] *Gospel Among the Dakotas*, pp. 54-103. [2] Gods of the waters. [3] Thunder gods.

and a beaver the south. These gods are the gods of war, cruel, destructive, and ever on the war-path. They are the deadly foes of the Oon-ktay-he.

Third. The Ta-koo-shkan,[1] invisible, omnipresent, ruling mind and passion. He can make man a beast, and *vice versa*. He rejoices in human suffering and death. His symbol is the boulder, also the consecrated spear and tomahawk, and his home the four winds. The raven, buzzard, and wolf follow in his train.

Fourth. The Toon-kan,[2] dwelling in stones. The Dakota paints a round paving stone red, puts swan's down on it, and then prays to the god who takes possession of it. Compare Isaiah lvii: 6, and similar stones worshiped by some tribes in India.

Fifth. The Ha-yo-ka.[3] Of these there are four varieties, all armed with bow and arrow and deer-hoof rattles charged with electricity. One set carries a drum, using a miniature Wa-ke-yan as a drumstick. One of them reveals himself in the gently whirling wind that just stirs the grass on the prairie or the dry leaves in the woods. These gods express joy by groans, and pain by songs. Heat makes them to shiver, and cold to perspire. When the mercury congeals they shield themselves from the sun and fan themselves, but in July they bury themselves in furs, and shake with the cold. They feel safe in peril, and quake in its absence. With them good and evil, truth and falsehood are reversed, and their aid is sought in amorous intrigues. Their worshipers meet in a lodge, nearly naked, wearing conical hats, sing and dance round a pot full of boiling meat, snatching pieces, which they bolt at once, throwing the boiling water over their bodies, complaining that it is cold. The skin, however, has been previously deadened by rubbing with sorrel.

Sixth. The sun and moon. The moon is regarded as the representative of the sun; and though they do not look on him as malignant, they worship him by making an incision in the muscles of the breast and arms, suspending themselves by cords attached at one end to the top of a tall pole, and at the other to the muscles which they cut [compare hook-swinging in India]; so without food or drink they remain hanging for days, fixing their minds on the object they seek, and waiting for a vision from above. Others cut into the muscles of the back and hang buffalo heads to them by hair ropes, which jerk the wounded part as they move in the dance. Sometimes skewers are passed under the muscles and the cords attached to both ends of them; then they pull till either skewer or muscle breaks, or till the same result is produced by the jerking of the heavy heads in dancing, while the eye faces the sun unflinchingly, waiting for the vision.

Seventh. The armor gods. These are the tutelar deities assigned to young men on coming of age, and residing in their consecrated armor; consisting of a spear, an arrow, and a small bundle of paint, which is a sacred thing, and all-powerful to control their future destiny. Similar is the eighth, the spirit of the medicine sack, conferred on initiation into the order of the sacred dance. The Dakotas have, also, penates in the form of a human image enclosed in a round wooden box and enveloped in sacred swan's down.

Ninth, and last, is the Wa-kan-tan-ka.[4] This is sometimes rendered Great

[1] The moving god. [2] Stone god. [3] The anti-natural gods. [4] Great Wakan.

Spirit, but he is the least and most recent of their gods, not worshiped or mentioned, only before white men. The word itself is not primitive, but derivative, like others devised to designate objects unknown till recently. They suppose that the white man's Wakan must be greater than theirs, and hence the term. There are other gods besides these, but these may suffice.

Their most primitive mode of worship is the making of offerings; as on recovery from sickness they offer a piece of red cloth, or a few skins. Sometimes a pan or kettle is dedicated for a time. Red paint is used for offerings; so, also, is blue. No worship is complete without the sacred application of paint. Swan-down colored scarlet, is also needful in offerings. Tobacco and tobacco smoke are also offered, the mouth-piece of the pipe being turned toward the god, or smoke blown on his image. A dog is counted an acceptable offering. Food is often offered to the spirits of the dead, and if left on the grave becomes public property. A Wakan feast is often made to the gods; invited guests eat it, but the offerer may not share. The drumming and singing that precedes such a feast belongs to the worship. Particular parts of each animal killed in hunting are offered to the gods; as the head or heart of a deer, the wing or head of a duck.

THE MEDICINE MAN.

Another prominent idea in their worship is purification, and this is effected by the E' nee pee,[1] which is produced by throwing water on hot stones under a frame-work covered with robes or blankets. New fire, produced by friction, enters into many sacred ceremonies, and sacred dances and feasts are the chief public ceremonials of their religion. Among these are the Wakan feasts, or feasts of first fruits, the feast to Hayoka, and the raw fish feast, when fish, just out of the water, are devoured in a frenzied way, without touching them with the hands.

The Dakotas have no proper priesthood; still there is a special class who are generally employed as priests, conjurors, and sorcerers, known among the

[1] Vapor bath.

whites as medicine men. They are regarded as not properly men, but gods in human form. Originally waking into existence in the upper air, they floated away among the gods, becoming assimilated to them, and learning from them all the mysteries of their profession. When they die, they are said to return to the gods to receive a fresh inspiration and a new incarnation. They can do this, however, only four times; after the fourth incarnation they pass into what a Buddhist would call Nirvana. In their performances is a good deal of sorcery; professed, and possibly real converse with evil spirits, who enable them to inflict sickness and death, and also to heal disease. Along with this is a great deal of unmistakable jugglery and imposture. Like noted mediums among us, they untie themselves however securely bound, and profess to bring communications from departed friends.

They suppose each man has four spirits. One dies with the body, the second remains near it, the third gives account for the deeds done in the body, and passes over the Milky Way, which they call the path of spirits, and the fourth lingers with the small tuft of hair kept by relatives till they can throw it into a hostile territory, where it becomes a messenger of disease and death to their enemies.

Let us now pass from these beliefs of the tribes of our own continent to the religious ideas of the Battas in Sumatra.

Rev. J. Ennis, when in Natal, on the northwest coast of that island, in September, 1837, learned from some of them their ideas of God. They call him Debata hasi asi, the creator of all things, who can do all things, and sees all things, even the hearts of men; yet he does nothing but sleep, though once a year he eats. Then his head is anointed with fragrant oil, music plays, his attendants stand around him, and the feast lasts seven days.[1] He has three sons, who govern the world.[2] But they delegate the government mostly to inferior spirits called Debatas and Begus, and these are the principal objects of worship. The Debatas are divided into three classes: First, those above, who rule in heaven, a delightful region, full of fine houses, and fields, and trees, the abode of the souls of the blessed. Second, those in the middle region, who govern the earth. Third, those below, who rule over a wretched abode of misery, where dwell evil spirits and the souls of bad men. Among their principal deities are Batara guru, the god of justice, Soripada, the god of mercy, and Mangana mulan, or bulan, the author of evil, who has the principal management of human affairs, and can at any time thwart the good intentions of the rest. So the Battas are most anxious to secure his favor, and care little how the others regard them, if they have his good will. Batara guru, as his name denotes, is the instructor of men; and when Soripada thinks his dealings too severe he moderates them. Besides these, they worship the serpent Nagapadoka, that has horns like a cow, and bears up the earth.

The Begus are inferior to the Debatas, and live on the tops of mountains, in impenetrable swamps, and under the earth. They hover under dark, heavy

[1] Has this any connection with the Sabbath?

[2] Is this a dim tradition of the Trinity?

clouds, and are spirits without bodies. The Battas think the dead become Begus, of two kinds, the bad and the good. As they are very numerous, people live in great fear of them, and every village, house, and person has a guardian; yet myriads wander about, inflicting trouble. The evil Begus are especial objects of worship, in order to avert their displeasure. They are thought sometimes to appear to men when alone, and make known their will in various ways. Skill in understanding them fits a man to become a priest. In every village are two or three priests, called Sibasa. Sometimes one of these, seated and holding his hands in a certain position, with anointed head and hair flowing loose, under the influence of music begins to tremble and act like a man intoxicated; then the Begu enters him and speaks through him his will to men, especially in times of prevailing sickness, and in war. The numerous offerings made on such an occasion are afterwards eaten by those who offered them, as a sacred feast.[1]

Rev. H. R. Hoisington introduces us to much of the ancient literature of the Hindoos. He wrote for the American Oriental Society a syllabus of the Siva Gnana Potham,[2] a Tamil translation of an old Sanskrit Agama, which, after a preface on logic, treats in a concise, poetic style, of deity, soul, and matter. He also gives us a translation of the same work,[3] with an introduction and notes, and a translation of the law of the Tuttivam,[4] a synopsis of the mystical philosophy of the Hindoos, presenting the standard doctrines of the orthodox Saivas of southern India, besides a translation of the *Light of Sivan*,[5] a metaphysical and theological work written by a Vaishnava Brahman not more than two centuries ago, and, with the previous works, giving a good *résumé* of the tenets of philosophical Hindooism. In addition to these he wrote, himself, an essay on that system,[6] in which he tells us that the Hindoos were not the first inhabitants of India. Remnants of the aborigines still exist, whose dialects have no affinity to the Sanskrit, and whose creeds bear no traces of Hindooism. They seem to be descendants of Shem, and entered India[7] across the Indus. They also came by sea to the southwestern coast. Their Hindoo conquerors probably descended from Cush, and entered India by the Punjaub. Buddhism, a school of primitive Hindooism, allied itself with the Lunar line of Hindoo kings. The Brahmans, who, as some think, did not belong originally to the Hindoo family, sided with the Solar line, the rivals of the others, and war raged between the two till the Buddhists were driven into Ceylon and further east.

The Brahmans now constructed their system, engrafting on previous systems that type of idolatry which has molded India so long. This includes not only the Hindoo Pantheon, with its rites, but also the institution of caste, by which they made themselves supreme in Church and State. That there was at first only one caste is admitted in the Puranas. The struggle between the Brahmans and Kshatriyas, a Scythic race, was long, till the latter, subdued at length, became the warrior caste, inferior to their conquerors. The Vaishyas, another

[1] *Missionary Herald*, 1838, pp. 403–404.
[2] *Jour. Amer. Oriental Soc.*, Vol. II, pp. 135–154.
[3] Do., Vol. IV, pp. 31–102.
[4] Do., Vol. IV, pp. 1–30.
[5] Do., Vol. IV, pp. 125–244.
[6] *Bibliotheca Sacra*, 1852, pp. 237–258.
[7] Allen's *India*, p. 23.

Scythic tribe, were next subdued, and, as merchants and farmers, became subordinate to both. The Sûdras, probably the Sudrakai of Strabo, when conquered became the servant caste. Combining all these into one body involved some friction, so the Vayu Purana makes Brahma assign each caste its occupation, to prevent wrangling. The subdivisions of caste are as various as human occupations. The palmy days of Brahmanism were the thousand years preceding the Moslem invasion of India.

The original form of Hindooism was probably that of the Vedas, the oldest Sanskrit writings.[1] Their style is so unlike that of the polished epics of the Ramayana and Mahâbhârata, that the readers of these cannot understand them. The original form of worship was Sabian, and the ritual of the Puranas is so different that a Vedantist would now be looked on as an infidel.

The two epics were composed in the Punjaub about 300 B. C., as well as the institutes of Menu, and probably some of the Puranas. These are the materials for Hindoo mythology. They are old legends committed to writing, and form the sources of the eighteen great Puranas. In these last, antiquity is forced to conform to modern puerilities, and in them all are traces of a previous philosophical religion. Ostensibly, the Brahmans hold to the Vedas; but practically they deny them, and base their system of incarnations on their mystic philosophy.

The Bhagavat Geeta is an episode in the Mahâbhârata,[2] discussing the nature of God and the destiny of man. In it Krishna encourages the hero Arjuna to fight against his kindred, because mind and matter are distinct, and duties must be done without regard to consequences; that death and life are only slight modifications of the same being, and hence the slaughter of a friend is a matter of indifference. He says:

> "Ne'er was the time when I was not, nor thou, nor yonder things of earth.
> Hereafter ne'er shall be the time when one of us shall cease to be;
> The soul within its mortal frame glides on through childhood, youth, and age,
> Then in another form renewed, renews its stated course again,
> Whence on to battle Bharatha.
> Soul is not born. It doth not die. Past, present, future, knows it not.
> Ancient, eternal, and unchanged, it dies not with the dying frame.
> Who knows it incorruptible, everlasting and unborn,
> What recks he whether he may slay, or fall himself in battle slain?
> As their old garments men cast off, anon new raiment to assume,
> So casts the soul its worn-out frame, and takes at once another form.
> Thus deeming, wherefore mourn for it?"

This poem does not wholly reject the Vedas, but speaks of them as deficient, and without true purity of mind. From these works Hindooism was easily developed in the Puranas, the last of which are only three hundred years old. They complete the Brahmanical writings.

Hindooism may be divided into three periods: (a.) The patriarchal period of the unwritten Vedas, when Hindoo ideas resembled those of Noah and Abra-

[1] These were put into their present form fourteen centuries B. C. Allen's *India*, p. 23.
[2] This is described in Allen's *India*, p. 25.

ham. (b.) The philosophical, when these doctrines, losing their purity, were molded into a system of philosophical religion. It lies back of 300 B. C. (c.) The Puranic, or mythologic, when the Brahmans became supreme, and founded the Hindoo Pantheon and temple worship. Its earlier form was the Epics and Institutes of Menu, its later the Puranas. These, though alike in many things, differ, in that some make Brahma supreme, some Vishnu, and others Siva. The two schools of Saivas and Vaishnavas include the whole.

The Brahman can quote Sastras either to support idolatry or prove the unity of God; for while they hold one God eternal, self-existent, all-pervading, formless, and unchangeable, without emotion or desire, yet he can be manifested through material organisms. He exists, moreover, as Purusha and Sakti,[1] and each divine act is by the coöperation of these two. In acting, each must have its organism. Many symbols represent this, especially the Linga. This is usually compound, representing the two in coöperation, and is an object of worship superior to most of their idols. The proboscis of the elephant is another; hence Pulliyar is adored more than any other god, for he is the god of action, the reproducer. As these two energies may be developed any number of times, the number of their gods is without limit.

They hold that the production and government of the universe involve five divine operations, and, as each must have its organism, ten gods. These include Brahma, Vishnu and Siva, also the Obscurer, and the Illuminator, or grace-giver, inferior to the three first, but dealing with spiritual beings, and, therefore, with organisms more ethereal. The others manage the material universe. Some make Vishnu supreme, and others Siva, but only as the index of the eternal God.

Of these deities, the first is the Illuminator, with a form which is a complete development of the perfections of the five. In him divine wisdom is supreme. He dwells in light. The soul to whom he reveals himself sees things as they are, and freed from its organism, will not be born in another body; for they hold that every soul undergoes many births, till it exhausts all the good and evil retribution it deserves.

The second is the Obscurer, born of the first. His form is deficient in wisdom, but possesses the attributes of the others, and in him action is supreme. He guides the soul through all its transmigrations, while working out its salvation from matter; and, as he keeps men ignorant of spiritual things, that they may work out their fated courses of action, he is named the Obscurer, though they regard this action of his as benevolent.

The third is Rûdra, or less correctly, Siva, born of the second, with a form deficient in the characteristics of the first two, but with more of wisdom than the two which follow. He is the Triad, the three so-called being only an expansion of him. His office is to continue the universe in existence through generation, growth, and destruction, with reproduction; hence called the Destroyer, but more properly the Reproducer, since he destroys in order to reproduce.

The fourth is Vishnu, born of Siva, and his office is to cause growth from birth to maturity, whence he is called the Preserver.

[1] Male and female energy.

The fifth is Brahma, born of Vishnu. He is the generator, and properly the agent of all the others, and so not generally recognized as a distinct god. His name should not stand first in the Triad. Pulliyar, son of Siva, is the active deity in production, and through him Siva effects the work of generation; as his agency is involved in producing the form of Siva, he has been called "The son who was born before his father."

These principles, variously combined, form the fabric of Hindooism. The initiated see them in the forms and dresses of idols, the ornaments of temples, the sacrifices, festivals, and performances of dancing women.

The Hindoos have several Triads; Siva, Vishnu, and Brahma are the embodiment of the physical powers of deity, but the government of man belongs to a higher god. The first three of the five gods form another Triad; in this Siva is held to contain the last two. This Triad is known only to the initiated. A third one is seen in the three gods usually drawn on the festival cars, representing the supreme deity, whose form embraces two divine energies, and also these energies separately embodied. The former is always a male, and the two latter a male and a female, symbolizing the unity of the godhead, and the divine *modus operandi*. Hence Juggernaut is called "The Universal Lord."

Passing on to China, we condense the following account of Confucius from S. W. Williams' *Middle Kingdom*, Vol. I, pp. 519–532, and *China and the Chinese*, by Rev. John L. Nevius, pp. 46–54.

Confucius, of the family named Kung, and generally called by his disciples Kung fu'ts, *i. e.*, Kung the teacher, Latinized into Confucius, was born in the province of Shantung, and department of Yin chau, B. C. 551. His parents were poor but respectable. Commencing study very young, the same year that Cyrus became king of Persia, he became a teacher at twenty-two, and soon had many disciples. Several petty princes asked his aid in administering their government, and the measures he introduced proved beneficent. His ethics, however, were so severe that he did not remain long in one place. His life was spent in going here and there, vainly trying to reform abuses, studying and teaching. He died at the age of seventy-three, B. C. 479, leaving only a grandson. Little appreciated while living, since his death he has been exalted to divine honors, and a perfection ascribed to him which he clearly and repeatedly repudiated. He says: "How dare I rank myself with the sage and the perfect man; I, who simply strive after virtue without satiety, and teach others without weariness? In letters I perhaps equal others, but I have not yet attained to practice what I profess. My failure to cultivate virtue properly, my not mastering what I learn, or moving toward the good I know, occasions me solicitude. I was not born in the possession of knowledge. I love antiquity, and seek knowledge there — a transmitter, not a creator." He seems to have arisen when tradition had so much worth preserving that a compiler was needed, and he was specially qualified for the work.

As he says himself, he originated no new doctrine; he simply expounded the teachings of his predecessors. His works show that the Chinese had no more

originality two thousand years ago than now. His constant reference to a past golden age gives a good idea of the moral and mental culture of the founders of Chinese civilization. Some of his maxims are as follows:

Grieve not that men know you not, but that you are so ignorant of men.

Without virtue, both riches and honor seem to me like the passing cloud.

The sage's conduct is benevolence in operation.

I have found no man who esteems virtue as men esteem pleasure.

The perfect man is never satisfied with himself. He that is satisfied with himself is not perfect.

Patience is the most needful possession in this world.[1]

The Chinese classics comprise "the five classics and the four books." Four of the classics existed before his day, and the fifth was a historical work from his pen. Of the four books, the first, called Ta Hioh, or great learning, contains the teachings of Confucius, as recorded and digested by his disciples after his death. The second, called Chung Yung, or Due Medium, is ascribed to Kung Kih, the grandson of Confucius. Both these have exerted great influence on China. The other two are small, and really antedate Confucius. These are almost the only text-books in the schools of China, and are regarded as the *ne plus ultra* of knowledge. They are made up of ethics, history, political economy, biography, and poetry. The religious element hardly exists in them. His disciples say that he did not speak of the gods, probably through ignorance about them. He taught positive truth in opposition to what was uncertain, and where he could not speak with certainty, chose not to speak at all. Once, when asked about death, he replied: "Imperfectly acquainted with life, how can I know of death?"[2] This is probably a later legend, but it indicates the popular estimate of the man. Yet toward the end of his life he wrote a solemn dedication of his writings to heaven. He assembled all his disciples, and led them out of the town to a hill where sacrifices had been offered for many years, erected a table, or altar, on which he placed the books; and then, turning to the north, adored heaven, and on his knees gave thanks for life and strength granted to complete them, and prayed that their benefit to his people might not be small.[3]

His system sets forth five relations, viz.: between emperor and officer, father and son, husband and wife, brothers, and friends. The principles connected with the first constitute Chinese political economy, and form a large part of his teachings. The next three relations belong to the family, regarded as the true foundation of the state. Here is inculcated a regard for law, which prepares one to be a good citizen, as he says: "Few, being filial and fraternal, love to offend their superiors; none, not liking to offend superiors, have stirred up confusion."

Mencius, a disciple and editor of Confucius, was born about 371 B. C., in the city of Tsau, in Shantung. His father died soon after and left him to the

[1] *Middle Kingdom*, Vol. I, p. 520. [2] Do., Vol. II, p. 236.
[3] *Chinese Repository*, Vol. XI, p. 421, and *Middle Kingdom*, Vol. I, p. 529.

care of his widow, who has been cited as a model for mothers. Living near a butcher's premises, she removed from there, lest the sight of blood should harden the heart of her son to suffering. Her next home was near a cemetery, and she left that lest he should lose the solemn impression of funeral services, from their constant repetition.

Mencius was the scholar of Tsz'sz', the grandson of Confucius. After completing his studies he taught the king of Wei, till he found his teachings were not regarded, when he went into retirement, completed editing the works of Confucius, and composed his own great work. He died 288 B. C., and after death received the title of "Holy Prince," and in the temple of the literati is placed next to Confucius, and only regarded with less reverence than that sage. Some of his sayings are:

He who gains the hearts of the people secures the throne, and he who loses them loses it.

Good laws do not win the people like good instruction.

To a king consulting him about the conquest of a neighbor, he replied: "Take his kingdom if the people would like it; if not, let it alone."

"I love life and justice," he said, "but if I cannot have both I would give up life and retain justice." "Though I hate death, there is that I hate more than death."

In many of his teachings he endorsed Confucius. In native vigor he exceeded him. It is interesting to know that, like him, Confucius also had a mother who carefully fostered in him a love of morality, and directed his studies.[1]

Filial piety is the foundation of Chinese religion; disrespect to parents has been punished with death. A Chinaman dreads no epithet more than "undutiful." From childhood he is taught to be respectful; to cherish his parents when they are old, and when they die to worship them. He is exhorted to avoid vice, lest it injure the body he derived from his parents. One of his strongest motives to virtue is to be able to honor and not disgrace his ancestors.

The relation between husband and wife is not made much of. Woman is made the servant and not the companion of her husband. One adage is: "The elder brother is to love, and the younger one to honor."

The five virtues are benevolence, or humanity — it is hard to say which of these words best renders the original[2] — righteousness, propriety, knowledge, and faith. It is noticeable that benevolence is first. Confucius had so exalted an idea of this that he held that few even of the ancients attained to it.

"Tsz kung asked: 'Is there one word which may serve as a rule of practice for all of one's life?' The master said: 'Is not shu[3] such a word? What you do not want done to yourself do not do to others.'" This is the nearest approximation ever made by man to the rule of Christ, though it is negative and not positive, as his is, and was also a saying of the rabbis before Christ. Yet he says again: "When one improves his nature to the utmost, and acts on

[1] *Middle Kingdom*, Vol. I, pp. 521–526. See *Chinese Repository*, Vol. XVIII, pp. 337–341.
[2] Letter of Dr. S. Wells Williams.
[3] Reciprocity.

the principle of reciprocity, he is not far out of the way. In the way of the superior man are four things, to none of which I have attained: to serve my father as I would require service from my son; to serve my prince as I would have my servant serve me; to serve my elder brother as I would be served by my younger brother; and to behave to my friend as I would require him to behave to me."

The next virtue is defined as that which ought to be done, as set forth by the conscience.

The third virtue relates to outward forms, each inward state being supposed to have its own proper outward expression, the cultivation of which fosters the inner virtue. Certain rules of propriety are also attached to different times, ranks, positions, and occasions in life, and are regarded as the chief corner stones of society and government. Confucius did much to produce the formalities and conventionalities of the Chinese, though aristocratic etiquette in Europe is sometimes, perhaps, equally exacting.

The fourth virtue relates to general intelligence, especially a knowledge of one's self and men, and of the practical way of dealing with others. For men in office he insisted on a life of severe study and patient investigation.

The fifth virtue includes both faith and truthfulness as the ground of faith. Sincerity of heart is much insisted on, and he spoke of the difficulty of controlling the tongue, from his own experience.

While Confucius refers to the sages of the past as the authors of his system, he rests its authority on conscience, to which he constantly appeals. He sought to interpret and follow the suggestions of man's moral nature. This has so molded the intellect of China that appeals to the fixed principles of right, as attested by conscience, are common, even among the masses.

His ultimate object was the promotion of good government. He sought to qualify his disciples to control men, by giving rules for self-government and culture, rather than by devising the best code of laws, or of governmental coercion. He relied on moral, not on physical, force; on example, rather than punishment. He believed that if rulers were themselves good, the people would obey them. Yet it is to be regretted that, following his predecessors, he sanctioned the worship of idols and ancestors, encouraged national self-conceit, and made it obligatory on a son to revenge the murder of his father. He was a practical philosopher rather than a metaphysician; a close observer of men, and sincerely desirous to teach the truth and do good. It is not too much to say that his system of ethics is the purest that has originated outside of Holy Scripture, and that he has exerted a greater influence for good than any other uninspired writer.

Rev. I. Tracy has also given an account of Confucius in the *Bibliotheca Sacra*.[1] In some things he brings out the dark side of his character more clearly, as where he says[2] that on one occasion he was guilty of lying, and that he divorced his wife. He speaks of him as "a proud and ambitious man," though he sought office that he might be more useful. Again: "Religion formed scarcely any appreciable part of his character."[3] When asked about

[1] Vol. III, pp. 284–300. [2] Do., p. 288. [3] Do., p. 289.

the service of the gods, he said, "Not yet do we serve men; how can we serve the gods?" He taught that men are naturally virtuous, and attributed their vices to ignorance and bad example. Mr. Tracy gives us another extract from his writings: "The ancients first promoted good order in their own provinces, and, in order to do that, first regulated their own families. They who wished to do this, first became virtuous themselves, and for this purpose first rectified their hearts, and as a means to that, first purified their motives. Purification of motives depends on perfection of knowledge, and that again on investigation; for, things being thoroughly investigated, knowledge is perfected — so motives become pure, the heart right, the character virtuous, the family well regulated, the nation governed, and all under heaven enjoy peace."

Some of his sayings indicate that he was a fatalist, but in others he uses the word heaven in the sense of God. His chief aim was to make men virtuous *in this life.* He told his disciples that the people of the west also have their sages, and this, some say, induced Mingti to send messengers to find Christ A. D. 60, who went no further than India, and brought back Buddhism; but it is now known that Mingti was pretty well aware of the Buddhism he sent for.

BUDDHISM.[1]

A religion that boasts more followers than any other on the face of the earth is certainly worthy of our study, and that can be pursued to the best advantage by looking at its own account of its founder, and then glancing at some of the changes his system of religion has gone through since his death. The highly interesting nature of the subject must excuse the going outside of the writings of missionaries of the American Board, and collecting a few statements from the recent work of Rev. Joseph Edkins, D.D., a missionary of the London Society.

Shakya, Shakyamuni, Sarvartha, Sidda, Siddharta, and Buddha, also in Chinese Fuh, Gautama, and Julai,[2] for he is known by all these names, was the son of Suddhodana, king of the city of Kapilavastu, near the borders of Nepaul, who was subject to the king of Magadha, a country in southern Bahar. Of these names, Siddharta was his original name, by which he was known in his father's house. Sidda and Sarvartha seem to be variations of this; Shakyamuni, or S'akyamuni, means "the sage of the house of Shakya or S'akya," his native tribe; Gautama is a patronymic, and Buddh, or Buddha, is the title of a superior position in the universe, which a man may attain to through knowledge and negation of self, and which now belongs to him. Fuh is the Chinese form of this, pronounced differently in different provinces, as Fat, Hut, Veh, etc.

The Chinese say he was born in the year B. C. 1027, and that his mother's name was Maya. The Ceylonese assign that event to the year B. C. 623. The Siamese say B. C. 653. Other dates are assigned by different authorities from B. C. 1800 down to B. C. 457.[3] Dr. Edkins prefers the date of B. C. 623. At fifteen years of age he was formally invested with the rank of heir apparent, and at seventeen he was married to a Shakya maiden named Yashodara. He

[1] Allen's *India*, p. 34; *Middle Kingdom*, by S. Wells Williams, Vol. II, pp. 249-260.
[2] Edkins' *Chinese Buddhism*, p. 4.
[3] Do., pp. 15-16.

was taught every accomplishment, and supplied with all that rank and wealth could procure, but he soon learned to despise them. The tradition is that, in the year after his marriage, he met at the east gate of the city a Deva in the form of an aged man with white hair. Again the same Dev appeared at the south gate, as a man laboring under disease. At the west gate he saw a dead body carried out to be buried, and at the north gate a begging priest in the garb of an Ascetic. To the question who he was, the priest replied, "I am a Bikshu,[1] practising sacred duties and obtaining the reward of freedom from action," then vanished from sight. The prince felt "This man knew my fears of old age, sickness, and death, and has pointed out the way of deliverance," and from that time resolved to become an Ascetic.

At the age of twenty-five, on the seventh day of the second month,[2] — though according to a statement on page thirty-four, it was in his twentieth year — three years after his marriage, while thinking of the life of a recluse, light shone out from his body and reached to all the palaces of the Devs — we give the story without note or comment — who came to congratulate him, and, by their aid, he left his father's house in the night, and went forth to the lonely slopes of the Himálayas. There he lived on hemp and barley, and drank melted snow, till, at thirty years of age, he attained the knowledge of the true condition and wants of men. After having passed through the grade of Púsa,[3] he attained to the rank of Buddha in his thirty-fifth year, on the seventh day of the second month. Thirty-five days after that he went to Benares, having, at the urgent request of Brahma and Indra, refrained from entering the state of Nirvana,[4] and consented to open the gate of "the sweet law" to mortals. On the way he sat by a pool in a state of ecstatic trance[5] for seven days, and the light that radiated from him restored a blind snake in the pool to the form of a young man, who then became his disciple. On the seventh day of the third month, the spirit of the tree under which he lay in his trance, troubled at his long fast, induced two merchants passing by to give him barley, mixed with honey, in four bowls of fragrant stone. He took them, and in their sight formed the four into one, and administered the vows of discipleship to the two merchants, imposing on them the five prohibitions.

At Benares he discoursed on the fact of misery, the need of separation from the entanglements of the passions, and the extinction of these miseries and entanglements by reformation. Godinia and four others listened and asked permission to begin the monkish life. This he granted, and discoursed further of the non-permanence of human actions, the emptiness of the outer world, the non-existence of the Ego, deliverance from thraldom by the cessation of faults, and the consequent attainment of the rank of Arhan[6] — the highest of the four grades of disciples. Thus the world had six Arhans, and the three precious ones, viz.: Buddha, Dharma, *i. e.*, the revolving of the wheel of the doctrine of the four truths, and Sanga, *i. e.*, the company of the five Arhans. This was the foundation of the Buddhist assembly of believers distinguished by vows of

[1] Religious mendicant. [2] *Chinese Buddhism*, p. 18. [3] Inferior god.
[4] Eternal unconsciousness. [5] Samadhi.
[6] Fourth grade of wisdom. The four are Sudawan, Sidagam, Anagam, and Arhan.— *Chinese Buddhism*, p. 182.

celibacy, abstinence from animal food, and the occupations of social life. The Sangarama[1] and Vihara,[2] or monastery, was soon a necessity.

Upasakas, or lay brothers, who kept the rules at their own homes, were also received, and as soon as the whole number reached fifty-six Shakyamuni dismissed them all, to go about living on the alms they begged, and everywhere preach the doctrine of the four miseries. Thus monastic vows, living in communities, voluntary poverty, and universal preaching formed the basis of the structure of Buddhism. In a few years India was filled with communities of monks, and in the cool season Bikshus, or mendicant preachers, everywhere taught the true way to Nirvana.

On the banks of the Nairanjana Buddha again met the king of the devils, who had once tried to prevent his attaining to that rank, but now himself sought to enter the Nirvana. Buddha, however, refused him, as not *mentally* prepared for that change. He did not, however, refuse applicants from other worlds. He ascended to the Tushita paradise, one of the four Buddhist paradises, to teach the new law to his mother. On the banks of the same river, five hundred Guebres were led by his discourse on the four miseries to become Arhans and throw their implements of fire worship into the stream. The king of Rajagriha and all his leading men, Brahmans, and people, became disciples, and here Buddha taught for many years. Three years later he was invited to Shravasti, to the house and garden of Jeta, provided for him by the king's eldest son and a rich noble; and here he made laws for the punishment of theft, slander, and assassination.

After twelve years' absence, his father sent for him to return. Buddha sent a disciple to perform certain magical works before him, and the king came out thirteen miles with an escort of ten thousand to welcome him, and ordered five hundred noble youths to become monks. Buddha's own son, Rahula, joined the number, with fifty youth of the nobility as his companions. While boys were received, with their parents' consent, from twelve years of age and upward, they did not take the full vows till they were twenty. Women also asked and received permission to take them. Thus, in twelve years, Buddhism had spread over sixteen kingdoms of India.

Buddha taught morality by rules of great strictness, and made metaphysics the staple of his teaching. That took the place of theology, and duty was viewed only on its human side. Obedience to the law of God was not taught; hence the absence of the idea of sin against God in his teaching, which dealt only with human misery, and ignored human guilt. A charm was employed to rescue a disciple from the snares of a harlot, and then Buddha sought to strengthen him against temptation by a grand display of dialectics. Philosophical negations were his cure for immorality. He failed to express the relation of morality to God. He knew the longing of man for deliverance from misery, and the struggle in the human heart between good and evil, but he was destitute not only of Bible, but even of Confucian light, though his defects could not destroy the witness of conscience to the distinctions of eternal and immutable morality.[3]

[1] Assembly garden. [2] Cloisters. [3] *Chinese Buddhism*, p. 37.

Hence, among his reasons for abstinence from animal food, we find no "Thus saith the Lord," but (1) the danger of eating a relation, who, through the changes of the metempsychosis, may exist in the form of the animal eaten; (2) the unclean smell and taste; (3) the fear caused by the smell among various animals; and (4) it interferes with the success of charms and magical devices.[1] Compare with this the Bible reason for the prohibition of murder, Genesis ix:6, "For in the image of God made he man."

In its idea of duty Buddhism leaves out the idea of obligation to God, and dwells only on the duty of lessening human misery and increasing human happiness. So we find[2] that if a woman lacking beauty and health prays to a certain Bodhisattwa[3] she will, for a million of kalpas, have a pretty face, and they who perform music before the same deity, shall be shielded by thousands of spirits from all unpleasant sounds. As one reads such things, he is tempted to ask whether Buddhism is creeping stealthily into the Christian church?

Dr. Edkins gives details of his literary productions, which cannot be here reproduced. He is said to have visited one of the heavenly paradises and taught Devas, P'usas, Buddhas, and Bodhisattwas. All were counted subordinate to Buddha, the self-elevated sage, and subject to his commands, ruling the world according to his law.

The "central Shastra" sets out with the attempt to prove that creation was not the act of the great "self-existent God,"[4] nor of the god Vishnu; nor did concourse, or commixture, or time, or the nature of things, or change, or necessity, or minute atoms, cause the creation of the universe. In the Buddhist view these deities are also subject to death, and men by certain specified virtuous acts may be born hereafter to become their successors.[5]

One of the writings of Shakyamuni is called the Prajna Paramita.[6] There are six Paramitas, and one of them contains six hundred chapters and one hundred and twenty volumes — eighty times the size of the New Testament. The entire series of Buddhist books in A. D. 1410, reached to six thousand seven hundred and seventy-one kiuen, or sections. Three fourths of it is translated into Chinese from the Sanskrit, and though much abbreviated and condensed in the translation, is seven hundred times the size of the Chinese New Testament.

Buddha made much of reciting these voluminous works. He directed the king of Shravasti, in order to avert national calamity, to have a hundred priests recite the Prajna Paramita twice in one day; that on journeys it should be carried a hundred paces in advance of royalty, on a table adorned with gold, silver and jewels, and that at home it should be kept on a lofty throne, and honored daily with reverential worship.[7] It is not every author that secures such honor for his writings, though it would be very strange if the spirit that narrates such incredible stories as Buddha's visits to heaven, and the instruction he gave to the gods, as veritable facts, does not diminish the measure of reverence he demanded for his writings. Wonderful stories are told of the rulers of India leaving their thrones to their brothers, on hearing them, and adopting the monastic habit.

[1] *Chinese Buddhism*, p. 204. [2] Do., p. 195. [3] An inferior deity. [4] Ishwara Deva.
[5] *Chinese Buddhism*, p. 219. [6] The utmost of wisdom made known. [7] *Chinese Buddhism*, p. 41.

At seventy-one years of age Buddha gave instruction in his esoteric doctrine, which is for the Boddhisattwas and more advanced pupils. It is an inner meaning added to the exoteric form.

Early Buddhism favored no castes; all were equal in the eyes of Buddha, and this made it very popular.

He also denied that one intelligent, personal God created and governs all things; but held that innumerable causes, constituting a moral fate, are constantly working out retributive effects by their inherent energy.

Toward the close of his life Buddha dwelt much on the doctrine of the Nirvana. The king of Kaushambi made an image of Buddha, five feet high, in sandal wood, covered with gold; and King Prasenajit made another of purple gold. These images radiated light, while the sky rained flowers, and Buddha said to them: "After my entrance into the state of extinction and salvation, I give my disciples into your charge." His aunt could not bear to have him leave her, and with her five hundred women, came and worshiped him; then returned and did marvelous things, such as walking on the water, or in the air, sitting or lying on vacancy, fire and water issuing from their sides and mouths, and then together they entered the Nirvana. Seventy thousand Lohans[1] also entered the same state. Buddhism seems never at a loss for numbers, however large.

On the fifteenth day of the second month, Buddha was in the city of Kushinagara, in a spot between two sala trees.[2] A loud voice proclaimed: "To-day the world's honored one will enter the Nirvana; whoever has a doubt, let him now come for its solution." The great Bodhisattwas, the various kings of the Jambhudvipa continent, the kings of the Devas, the kings of the rivers and mountains, of the birds and beasts, and his personal disciples, all came with their offerings, but he firmly and silently declined them. They then besought him to discourse on the cessation of permanence, on misery, on emptiness, and on the negation of self. So he instructed them in the four antitheses, viz., the permanence which is not permanent, the joy that involves sorrow, the I that is not I, and the purity that contains impurity. They besought him to remain, but he referred them to his writings, which would be the same as his personal presence.

The king of Magadha had killed his father, and therefore suffered from a painful ulcer; and when he lamented that Buddha was going where he could not heal him, Shakyamuni radiated pure and cool light as far as the king, and healed him. He, with his queen and five hundred and eighty thousand subjects, then came to the city to see the sage, and were taught, and his guilt was thus much lightened. We pass over other things which are mere repetitions. Ananda asked him: "Who shall be our teacher?" He replied, "The Shipara system of discipline." "Where shall we live?" Answer: "In the four places of meditation. (1) Meditation on the body. The body and the moral nature are identical in vacancy. (2) Meditation on receptiveness. Reception is not

[1] Chinese form of Arhan.

[2] The Sala tree is regarded in China as having been the horse chestnut (*Æsculus*).— Letter of Dr. S. Wells Williams.

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inside, nor is it outside, nor is it in the middle. (3) Meditation on the heart. It is only a name. The name differs from the nature. (4) Meditation on the law (Dharma). The good Dharma cannot be attained, nor can the evil Dharma be attained.[1]

Brahma not appearing in the assembly, the angry multitude sent for him, but his city was found extremely filthy, and the messenger died. Buddha created a diamond king by his magical power, who went, and, pointing to the filth, transformed it into good soil; he then pointed at Brahma, and by the use of a little of his strength made him come to Buddha.

Buddha then proceeded with his instructions, referring them to the book of discipline called Pratimoksha Sutra, which details the duties of priests; and, reclining on his right side, with his head to the north, his feet to the south, his face to the west, and his back to the east, at midnight, without a sound, he entered the Paranirvana. He lay between four pairs of sala trees. Two pairs lying east and west became one tree, as also the two pairs lying north and south, and in their grief changed to a stork-like whiteness. When he was placed in a gold coffin, it was found that it could not be moved, but Buddha himself lifted it to the height of the sala trees, and the coffin moved of itself in and out of the gates, going the round of the city seven times, and slowly proceeded to the place of cremation. After all was consumed, his mother came down from heaven, and the coffin opened of itself. The honored one rose up, joined his hands, and said, "You have condescended to come down here from your abode far away;" and to another, "For an example to the unfilial of other ages have I risen from my coffin to address my mother." Kashiapa was instructing five hundred disciples at a distant mountain, when an earthquake told him his master had gone, and at once he came with his disciples to the coffin. Buddha pitied him, and again the coffin opened of itself, and revealed the golden and purple body of Buddha, strong and beautiful. These stories are repeated just as they are given, that the intelligent reader may compare them with the genuine miracles of Holy Scripture.

Seven days after the cremation, Indra Shakra opened the coffin and took out a tooth of Buddha. A Raksha also took out two teeth. The citizens filled eight golden pots with relics.[2] On another page,[3] we learn that one tooth in a temple in China is "two inches and a half thick, and ten by thirteen in width (and depth?)." When his father welcomed him home, he is described as "sixteen feet in height," and his color a brilliant golden.[4]

Chinese tradition says Buddha was born in a palace, with a halo of glory round his head. One of the first things he did was to walk seventeen steps toward the four cardinal points, declaring aloud, "In heaven and earth is none greater than I."[5] The accounts of his marvelous strength and endowments are ludicrously incredible. The accompanying engraving gives a good idea of the exaggerated way in which his worshipers love to represent Buddha. This image is of bronze, fifty feet high. The reader can judge of its size by comparing it with the men in front. This image is at Kamakura, near Yedo, in

[1] *Chinese Buddhism*, p. 54. [2] Do., p. 58. [3] Do., p. 250. [4] Do., p. 32.
[5] Nevius' *China and the Chinese*, p. 85.

Japan. There is a door behind, by which one may pass inside. In 1871, an American sat on one of the thumbs and sang the doxology.[1]

Dr. Edkins gives the following specimens of Buddhist teaching. Kumarada, the nineteenth patriarch, says: "Activity comes from doubt, doubt from knowledge, knowledge from a lack of perceptive power, and this last from a morbid mind. Let your mind be pure and at rest, and without life or death, victory or defeat, action or retribution, and you have reached the eminence of the Buddhas of the past. All vice and virtue, action and inaction, are a dream and a delusion."[2] Kumarada died A. D. 23.

Haklena, the twenty-third patriarch, to the question: "How to attain to the true knowledge of things?" replied, "Do nothing. If you do anything there is no merit in it. By doing nothing you follow the system of Buddha."[3]

The reader will not be surprised to know that a reformed Buddhist sect appeared in the beginning of the sixteenth century, called Wu Wei Kiau.[4] It is described by Dr. Edkins, pp. 371–379. The following story is one of their traditions. The patriarch Haklena was told by Manura that five hundred of his disciples, who sought to delude him into showing them favor, had once been born as storks; and when he intimated a wish to get rid of them, they were induced to flee away with loud cries by the utterance of these words: "The mind follows the ten thousand forms in their revolutions. At the turning points of revolution there really must be darkness. By following the stream, and recognizing the true nature, you attain a position where there is no joy or sorrow."[5]

A little work of the Tang dynasty, called Twan-tsi-sin-yau, says: "To become Buddha the mind needs only to be freed from its affections; not to love nor hate; covet, rejoice nor fear; to do, or aim at doing, what is virtuous or vicious, is to leave the heart and go out into the tangible world. It is to become entangled in the metempsychosis in the one case, and much trouble and vexation in the other. The right method is in the mind; it is the mind itself. The fountain of knowledge is the pure self-enlightening mind. This is the method taught by all the Buddhas. Let the mind do nothing, observe nothing, aim at nothing, hold fast to nothing — that is Buddha. Then there will be no difference between living in the world and entering the Nirvana. Then human nature, the mind, Buddha, and the doctrine he taught, all become identical.[6]

It is no wonder that one of their schools — the Lin-tsi, its founder died A. D. 868 — teaches the following enigmas: "Is it to search in the grass where there is the shadow of the stick, that you have already come here?" And, "To kill a man, to strike with the sword a dividing blow, and the body should not enter the water." Such sentences certainly discourage the exercise of thought, and favor a hopeless, intellectual apathy.

The proton pseudos of Buddhism is its denial of God. Not that it denies the existence of gods, but it denies Godhead, leaving the name without the reality it represents. The Sanskrit name for God is Div, or Deva, corresponding to the Greek Theos, and Latin Deus, but Buddhism teaches that these are mortal, and limited in power, so that men can rise to their level, or, as in the

[1] *Missionary Herald*, 1879, p. 77. [2] *Chinese Buddhism*, p. 82. [3] Do., p. 84. [4] The Do Nothing Sect.
[5] *Chinese Buddhism*, p. 84. [6] Do., p. 163.

case of Buddha, have them sit at his feet to learn what he alone can teach them. Southey followed out Buddhistic ideas when, in his curse of Kehama, "he made him, though a man, a terror to the kings of the Devas."[1]

And here we need not go beyond the sparkling pages of Mr. Edwin Arnold, who, in introducing Buddha to an English audience, adorned with all the charms of poetry, cannot be supposed to introduce anything into the beautiful picture that would needlessly prejudice his hero. He says:

> "Nay; it may be some of the gods are good,
> And evil some, but all in action weak.
> Both pitiful and pitiless, and both —
> As men are — bound upon this wheel of change,
> Knowing the former and the after lives."

That is, subject to metempsychosis, or transmigration, as well as men. His Buddhist goes on:

> "For so our Scriptures truly seem to teach,
> That — once, and wheresoe'er, and whence begun —
> Life runs its rounds of living, climbing up
> From mote, and gnat, and worm, reptile, and fish,
> Bird, and shagged beast, man, demon, deva, God,
> To clod and mote again."[2]

Note the teaching: God climbs from mote, and worm, and reptile under the pressure of inevitable causes,[3] up to his high position and back to clod and mote again. The same substance now a clod may, after countless ages, or kalpas, become a god, and then, after a like lapse of duration, become a clod again.

How different from "the Father of lights with whom is no variableness, or shadow of turning." James i:17. To whom the pious heart adoring saith, "Thou Lord in the beginning hast laid the foundation of the earth, and the heavens are the work of thy hands. They shall perish, but thou remainest, and they all shall wax old as doth a garment, and as a vesture shalt thou fold them up, and they shall be changed; but thou art the same, and thy years shall not fail." Psalms cii:25–27. Hebrews i:10–12. And again: "From everlasting (eternity) to everlasting (eternity) thou art God." Psalms xc:2.

It may be replied that, in another place, the poem says:

> "Only great Brahm endures. The gods but live."[4]

True, it is in the poem, but it is there as an expression of a Brahmin faith, which Buddha denies, and the sacred books of Buddhism say: "A wise man can never be born in the abode of Brahma, because that god, in his ignorance of causes,[5] asserts that he can create heaven, earth, and all things. No wise man would live in the heaven of one so arrogant."[6] So boldly does Buddhism deny the Creator. Is it strange that, having thus dethroned God, the wretched Buddhist suffers the righteous penalty of such atheism in his dreary, desolate

[1] *Chinese Buddhism*, p. 197. [2] *Light of Asia*, p. 96. [3] Karma. [4] *Light of Asia*, p. 119.
[5] *i. e.*, the Buddhist causes, which that system puts in the place of a living, personal God.
[6] Edkins, p. 224.

hope only of annihilation? In Christian lands, some in their pity for the lost, try to think that, instead of suffering forever, they will cease to exist, but Buddhism, having denied the living God, leaves for Buddha himself no better portion than a dreary hope of eternal unconsciousness. Most righteous Nemesis! — that those who cry "no God" must also cry "no heaven."

The most influential leader of the Chinese Buddhists was Matsu. He said to his disciples: "You all believe that the mind itself is Buddha." . . . "The true method is to have no method. Out of the mind is no Buddha. Out of Buddha there is no mind. Virtue is not to be sought, nor vice to be shunned. Nothing should be regarded as pure or polluted." To the question, How to attain excellence in religion? he answered: "Religion does not consist in the use of means. To use means is fatal to attainment." And again, on the subject of advance in religion, he says: "Human nature suffices for its own wants. All that is needed is to avoid both vice and virtue; he that can do this is a religious man."[1]

A great change has taken place in Buddhism. Instead of the early prominence of Buddha, is now that of Kwan-yin; and in place of the much coveted Nirvana, the western paradise is now held up as the goal of desire. In its early days, retribution and the future life were prominent; now this last has gone into the background, and Buddhist monks are lazy, immoral, and profitless members of society.

Yet Buddhism has in some things prepared the way for Christianity, and furnishes a *point d'appui* for religious appeals. Dr. Edkins has an interesting chapter on this subject.[2]

In an imaginary dialogue, written in the *History of the Sung Dynasty*, concerning the merits of Buddhism and Confucianism, the Buddhist says: "Confucius refers only to one life, and does not allude to the unending results of a future state. His good man only benefits his posterity, and vice only entails present suffering. But the doctrine of Shakya has illimitable aims. Heaven and earth do not circumscribe its knowledge. Having, as its own idea, mercy seeking to save, the renovation of all the living does not satisfy it. It speaks of hell, and men fear to sin; of heaven, and they desire its bliss."

The Confucianist replies: "To be virtuous from a desire of heaven, is below doing right for its own sake. To keep under the body from the fear of hell, is not so good as to do so from a sense of duty. Worship offered to secure pardon, does not spring from piety. A gift made to secure a hundred-fold recompense, is not sincere. To praise the bliss of Nirvana, promotes sloth. By your system distant good is looked for, while present animal desire is unchecked. Though you say Boddhisattwas are freed from such desires, yet all men have them without exception," — and so the debate goes on.[3]

The geography of Buddhism deserves mention in a volume devoted to missionary science. Buddha's world has the Sumeru mountain for its center, separated by a wide sea from eight other mountains, which again are separated by another wide sea from a great circular iron mountain. A thousand of these

[1] *Chinese Buddhism*, p. 130.
[2] Do., Chapter XXII, pp. 353-370.
[3] Do., pp. 96-97. See also a curious paper on the same subject, *Chinese Repository*, 1833, pp. 265-270.

circular ranges make a small world, and three thousand of them a large world. Within each iron enclosure are four continents, with a sun and moon. In Jambhudvipa, the southernmost continent in our world, is India. Mt. Sumeru, to the north of it, is one million one hundred and twenty thousand[1] miles high, and of like depth under the surface of the sea; the highest of the Himálayas is five and a half miles high. It is composed of gold on the east side, silver on the west, lapis lazuli on the north, and crystal on the south. South of Jambhudvipa it is three hundred and sixty thousand six hundred and sixty-three yojanas to the iron enclosure. A great yojana[2] is sixteen miles, and a small one eight miles, making the width of the Southern Ocean either two million eight hundred and eighty-five thousand three hundred and four, or five million seven hundred and seventy thousand six hundred and eight miles. This iron wall is three hundred and twelve yojanas in height above the sea, and the same depth below its surface. Its circumference three million six hundred and ten thousand three hundred and fifty yojanas. Each iron-bound world has a Sumeru mountain in the center. Over the world are thirty-two celestial regions: four called paradises, ten of them called worlds of desire, and eighteen called heavens of form, because free from the passions that exist in the others, and these eighteen are divided into four stages of contemplation. Three of these heavens are in the first stage, and a like number in the second and third stages, and nine in the fourth. In the highest of all, called Akanita, is the Maha Ishwara.[3] The four highest derive their names from the ideas of vacancy, knowledge, want of properties, and negation of thought.[4]

Some of the Buddhist hells are under the region inhabited by man. One is one hundred and forty thousand miles below it, and the hell of unintermitted torment is two hundred and eighty thousand miles below, or twice the depth of the other.[5]

As to Buddhist measures of time, a kalpa is the period consumed in a change of the universe. These are large or small. In the small kalpa, the age of man dwindles from an immeasurable length to ten years, and increases again to eighty thousand years. Eighty of these make a large kalpa. In twenty of them the world is made. Twenty more it remains the same. In twenty more it is destroyed, and then vacancy remains for twenty more. We live in the second of these twenties, and eleven small kalpas must pass before destruction begins.[6]

Buddhism is emphatically the religion of China. The emperor Ming ti, either prompted by a dream which he had in A. D. 61, or by the words of Confucius, already mentioned, or, as now seems more likely, by his own desire to learn more of Buddhism, sent to the west for religious teachers. His messengers returned with this new religion A. D. 67.[7]

[1] Dr. D. O. Allen (*India*, p. 20), says that Mount Sumeru is six hundred thousand miles high, and one hundred and twenty-eight thousand below the surface of the earth, making a difference of one million five hundred and twelve thousand miles, but in such numbers a variation of even that amount makes very little difference. Around its base are said to be trees 8,800 miles high, bearing fruit as large as an elephant.

[2] Of these two yojanas, one equals four goshalas, and the other eight, and a goshala is the distance that the bellowing of a bull can be heard. Edkins, note, p. 223.

[3] The great self-existent one.

[4] Edkins, pp. 223–224.

[5] Do., p. 225.

[6] Do., pp. 221–222.

[7] Do., p. 87.

Besides faith in Buddha, Chinese Buddhists hold to inferior gods, called P'usa, who have not yet become perfect in knowledge; and, as they are nearer mankind, and so capable of greater sympathy with our race, they are more worshiped. There is a Northern Buddhism, whose sacred writings are in Sanskrit, and a Southern, with its holy books in the more recent Pali. In Thibet and Mongolia, the system is political as well as religious, and has for its head the Grand Lama, the reputed incarnation of Buddha, whose spirit at death is supposed to pass into the infant whom he selects for his successor. In China and Japan, though the system is not without a hierarchy, it has no political power.[1]

Buddhists believe in a benevolent God, associated with inferior ones, who seek to save men from evil, in the transmigration of souls and the efficacy of good works. Their rites consist of prayers, works of merit, and religious austerities to make provision for the wants of a future life.[2] Their temples are numerous, costly, and imposing, built in high places, in seclusion among the hills. They consist of several separate buildings, minutely described by Mr. Doolittle, *Social Life of the Chinese*,[3] and by Mr. Nevius.[4] In front of the three large images of Fuh is generally an image of Kwan shi yin P'usa, a virgin worshiped as the "Conferrer of sons," and generally represented like the Papal Mary,[5] with a child in her arms.

Kwan shi yin, or Kwan yin, was introduced into Indian Buddhism not long before the Christian era. In China he was worshiped probably in the Han dynasty. A modern change has taken place in his image. Down to the beginning of the twelfth century he was represented as a man, but in later times as a woman. The popular taste favors a goddess rather than a god. Hence the appellation, Goddess of Mercy. This indicates that the Buddhist mind in China assigns feminine attributes to mercy.

Salvation by teaching is a characteristic conception of Chinese Buddhism. It applies to all those fancied personages called Fuh and P'usa. The mission of Kwan yin for the salvation of men, is symbolized by her thirty-two metamorphoses for that end. Among these are the eighty-four thousand arms and hands with which she guides them. She teaches the non-existence of matter, and the infinite knowledge and mercy of Buddha. All evil is summed up in ignorance. To know the emptiness of existing things is to be saved, and so she seeks to save.[6]

There are also in some of the temples, several rooms representing the torments of hell, answering to Papal pictures of purgatory.[7] The idols are supplied with artificial entrails[8] through a hole in the back, if of clay or wood; but in the bottom, of those made from metal. Unlike the Pantheon of India, there is nothing indecent or calculated to inflame base passions in Chinese idols, but rather fitted to inspire reverence and awe.[9] Some temples have five hundred

[1] *Middle Kingdom*, Vol. II, pp. 258–259.
[2] Do., Vol. II, p. 251.
[3] Vol. I, pp. 239–242.
[4] pp. 86–96.
[5] Doolittle, Vol. I, p. 261.
[6] *Chinese Buddhism*, pp. 382–383, and see pp. 241, 245, 250; and Dr. Williams' *Middle Kingdom*, Vol. II, pp. 255–257.
[7] Doolittle, Vol. II, p. 100; *Middle Kingdom*, Vol. II, p. 257.
[8] Do., Vol. II, p. 276; *Chinese Buddhism*, p. 251.
[9] *Middle Kingdom*, Vol. II, p. 231.

priests, and in their picturesque mountain locations are the favorite watering-places of wealthy families in the summer. Buddhist priests generally become such early in life, because of orphanage or poverty, or on account of troubles that come later in life, or even through crime, as the disguise of a priest facilitates impunity from punishment. They take vows of celibacy, live on vegetables, and wear nothing made of wool or skins of animals. They shave the head, and wear a priestly robe. Their income is from the lands of the temples, free-will offerings, and money paid for services at funerals, and begging. They

A BUDDHIST HERMIT.

burn candles, use incense, and prostrate themselves before their idols. Some priests live as hermits, and others are walled up in rooms for years, only a small aperture being left open for the admission of food. This is sometimes done for hire, rich men paying a certain price for the supposed merit of the act, but sometimes it is for life.[1] Occasionally the hermit lives in a cave or cell in

[1] Williams' *Middle Kingdom*, Vol. II, p. 250, also 273; Doolittle's *Social Life of the Chinese*, Vol. I, pp. 238–246; *Chinese Repository*, Vol. I, pp. 285–289. On Buddhist idols in Siam, see *Chinese Repository*, 1850, pp. 548–551.

the woods or among the mountains, to which access is obtained only by such methods as are employed in the engraving.

The worshipers in Buddhist temples are chiefly old women, who, in their bitter experience[1] here, seek to become men in the future state, by their austerities. The priests appoint certain days for[2] selling tieh; *i. e.*, receipts for money payable in Hades. They tell them that, when they die, it may be hundreds of years before they return to earth, and, meanwhile, they are on expense there, as here, and money will fee the judges, so that their cases will come up sooner and be treated with more favor. So these drafts are bought, sealed with the temple seal, the words Na-mo O-me-to Fuh,[3] repeated over them some thousands of times, and they are laid away to be burned at their funeral, and so transferred with them to another world. As only one tieh can be bought on one day, the women eagerly purchase them, and spend their time at the temple in gossip, and in repeating over and over "Namo Ometo Fuh." They have rosaries to aid them in keeping count of the repetitions.[4] They also seek advantage in the future world by worshiping certain books; *i. e.*, prostrating themselves before each character in the volume, just as they do before the idols, so getting over about a page a day, and their horoscope decides how often they must go over the book in this way to have all their debts remitted in the life to come. These things, however, like the immuring in the cell, may be done by proxy, and the credit inure to the one who pays for the performance.[5] Papists recognizing the resemblance of Buddhism in many things to Romanism,[6] have charged Satan with counterfeiting the true religion; for besides the resemblances already mentioned, Buddhists[7] pray in an unknown tongue[8] to saints and intercessors, especially to the Virgin and child.[9] They pray for the dead. They have monasteries and nunneries, works of supererogation, a formal daily service of chants, burning of candles and incense, sprinkling of holy water, religious fasts and feasts, processions, images and pictures, and worship relics both real and pretended. The Buddhist nunneries are in deservedly bad repute for their immoralities. One in Fuhchau was summarily suppressed by the civil authority, about 1835, and has never been reopened, at least as a nunnery.[10]

We cannot find a more appropriate ending to these remarks on Buddhism than is furnished by the following excellent summing up of the case by Rev. E. E. Strong in the *Missionary Herald*, for 1881, pp. 7–9:

A LIGHT THAT DOES NOT ILLUMINE.

Since the publication of Mr. Edwin Arnold's *Light of Asia*, the life and teaching of Gautama Buddha have been quite generally discussed in our leading reviews. The coincidences and the contrasts between the history and the teachings of the great Buddhist hero, and of Jesus Christ, have been presented

[1] Nevius, p. 103.
[2] *Middle Kingdom*, Vol. II, pp. 253–263.
[3] Ometo Fuh is Chinese for Amitabha, or Amida Buddha.
[4] Nevius, pp. 106–109; *Middle Kingdom*, Vol. II, pp. 274–275.
[5] Nevius, p. 110.
[6] Do., p. 112; *Middle Kingdom*, Vol. II, p. 257.
[7] *Middle Kingdom*, Vol. II, p. 252.
[8] The Sanskrit.
[9] Kwan shi yin.
[10] Doolittle's *Social Life Among the Chinese*, Vol. I, p. 253; *Middle Kingdom*, Vol. II, pp. 255–257; Nevius' *China and the Chinese*, p. 102.

very fully. That some of these coincidences are striking, no one will deny; that the contrasts are as striking will probably be denied by some, but certainly not by any who look beneath the surface. Gautama was of a gentle, yet intensely earnest spirit, and seems to have been moved with compassion for the multitude like that which filled our Lord. He took upon himself the task of a reformer in the midst of a Brahmanism which was cold and proud and cruel. We would not question his benevolent purpose. But his particular object, and his method for attaining that object differ from those of Christ as night differs from day. Gautama was oppressed by the suffering about him; Christ was burdened for the world's sin. To the Indian prince the great evil was pain; to Jesus there was no evil to be compared with wickedness. The Buddhist would make men happy; our Lord would first make them holy. And as to the remedies suggested, the contrast is still more striking. Gautama taught that misery is inseparable from existence, and hence the only way to avoid pain was to escape from the prison of endless existences. This goal of unconsciousness, his highest good, could be gained not by help from without, for there were no gods even who could help, but by one's own efforts. He who would attain Nirvana must abandon all affection, check all desires, and by meditation seek to lose personal consciousness. But Jesus sought to quicken and not to benumb the affections; he would inspire every faculty to a more intense activity; he proposes to deliver his followers from their sin, and so bring them into conscious and blissful fellowship with the God of their salvation. Gautama sets before men eternal sleep, but Jesus offers them eternal life.

But it is in view of the lofty character of Shakyamuni and of the general purport of his doctrines, that Mr. Arnold has termed him "The Light of Asia." It has seemed to us that the propriety of this title can be settled in a better way than by investigating his life and teachings. Every one knows that it is the function of a light to enlighten. It is certainly miscalled if it cannot irradiate some definite area. Even if a light is hid under a bushel, it will certainly illumine the bushel. But the Buddhism of Gautama has not been thus hidden. For twenty-five hundred years it has had its opportunity to mold society throughout a vast area in the Eastern world. It has been received in India, Burmah, Siam, China, and Japan. Mr. Arnold boasts that more than a third of mankind owe to it their moral and religious ideas, and that countless millions daily repeat the formula, "I take refuge in Buddha." There can, therefore, be no plea that the religion of Gautama has not had the fullest opportunity to reveal its power, and it is fair to ask, after twenty-five hundred years, whether that religion has been efficient in the regeneration of individuals or of society.

The sufficient answer to the claim that Gautama was the Light of Asia is — the Asia of to-day. This has been the field of his conquests, but what have they secured for that continent? Hundreds of millions worship him, but is it a *light* in which they are walking? We need make no wholesale accusations against society in those nations, as though all wickedness prevailed there while all was light about us. We recognize fully the many good qualities found in the Hindoo, the Chinese, and the Japanese. We have no doubt that the in-

coming of Buddhism did much to ameliorate the harshness of Brahmanism, though it is more of a question whether it improved upon the Confucianism of China. But after admitting all that can reasonably be claimed as to the good qualities of these Asiatic races, every man who has seen the light of the Western world knows that those races, as races, are walking in moral and spiritual, as well as intellectual, darkness. Individuals may be lifted much above their surroundings, but the common people are sunken in what we can only call degradation. There can be no dispute about this. The laudations sometimes paid to the virtues of Orientals are only fair as answers to the wholesale depreciation in which a few indulge unwisely. Every man knows that the West is not looking to the East for light, but that the East, as it catches some gleams from afar, is slowly awaking to the consciousness that she is sitting in darkness, and, therefore, sends eagerly to Christendom for instruction. Look at the people over whom Buddhism has had sway. Are they walking in the light, or are they giving light? Though Buddhism was driven from India, yet Mr. Arnold's claim is probably true that "the most characteristic habits and customs of the Hindoos are clearly due to the benign influence of Buddha's precepts." But how far can they be called benign when India is left where she is to-day, weak, emasculated, ignorant; her people the victims of superstitions, her religion little more than mendicancy, her two hundred and forty millions of inhabitants so inefficient and incapable that they are subject to a nation of thirty-three millions, of an alien civilization, and living many thousand miles away. Look at Burmah, where the fullest fruits of Buddhism may be seen. The recent stories of atrocities in that land, due not less to the degradation of the people than to the corruptions of the court, show that darkness reigns there. In China, while Buddhism counts its millions of adherents, their religion is of so little account to them that they will at any time worship at either a Confucian or Taoist shrine. It has no other effect upon their lives than to make them more indolent. In Japan the reformed Buddhism is not that of Gautama at all, but, in all essential doctrines, the very opposite. Indeed, all the so-called reformations of Buddhism, of which its best followers have felt the need, have been reformations not backwards towards the teachings of Gautama, but away from them. Yet neither the old nor the reformed Buddhism has lifted the Japanese out of their darkness.

The truth is that Buddhism offers to man no power to attain the virtues it depicts. Human nature needs not merely to be taught concerning the way of righteousness, but to be helped along that way. Gautama revealed no such helps, neither from God nor man. He took away all spring from life, he sought to stifle every emotion, to crush every affection. He called men not to the active exercise of their powers, but to drowsy meditation. He left no place for woman in his system; it was only for men. He sought, by ignoring the gods, to stifle the instinct for worship; an endeavor so contrary to human impulses that his followers began to worship him. And now they worship his teeth, and hair, and images. When one looks at the condition of society, and especially of women, throughout the Buddhist world, and considers the superstitions and ignorance of the mass of Gautama's followers, it seems like a

sarcasm to call him "The Light of Asia." So ignorant are they of their own sacred books, that they are coming to the Christian scholars of Europe to teach them to read what their own saints and heroes have written.

Gautama was a gentle and pure spirit, melancholic but benevolent, wise in many ways, but not wise above mortals. Better than most of his race, he is justly conspicuous. He was a star in the night, bright, because of the gloom in which he appeared, but he was not the sun to drive that night away. If he were the *light* of Asia such thick darkness could not remain there. Asia still waits for the Light that enlighteneth the world. When her millions receive Him they will no longer walk in darkness.

The Tau sect, called Rationalists, and also Mystics, sprang from Laots, a philosopher born B. C. 604. His work, Tau Teh King,[1] is noted in Chinese literature. Tauism takes its name from Tau,[2] the first character in the title of that book.[3] He was a contemporary of Confucius, who visited him, but did not comprehend him. His followers despised the simple, practical doctrines of Confucius. Tauism, however, has passed from philosophy to superstition, and has busied itself in seeking the elixir of life and the philosopher's stone. Its characteristic is materialism; matter, according to it, is eternal. The grosser part tends downward, and constitutes the earth and human bodies; the more refined essences tend upward and assume the form of stars, and human souls. The five elements are metal, wood, water, fire, and earth, and their sublimated essences form five stars, called by their names, and exercising a mysterious influence on human destiny. They come down to earth and enter into relations with men. In connection with this system, alchemy and astrology flourish.[4]

The popular belief is that Laots existed as a living principle before creation. After the transformations of thousands of years he was personified as "Holy Ruler of Wonderful Nonentity;"[5] again, after countless ages, as "Holy Ruler of Wonderful Entity;" and next as "Holy Ruler of Chaotic Confusion." After the creation of man, he appeared repeatedly as king, and as teacher. As the philosopher Laots, he came down from heaven in the form of a sunbeam, shaped like a particolored ball, and fell into the mouth of a sleeping virgin, who bore him after a gestation of eighty-one years, his hair already white, and his name meaning "the old boy." He is not a favorite object of worship, inferior deities being favorites, as more likely to be interested in men — showing equally with Buddhism how humanity craves the God-man, Immanuel, God with us.

Lu tsu, the god of medicine, is a great favorite, because he is supposed to pity men in sickness, and comes from heaven for their relief. He lived about one thousand years ago, and on his way to attend a literary examination was put to sleep at an inn, by one of the genii, and dreamed that he rose to become prime minister. When he woke, the jin told him his dream,

[1] Canon of Reason and Virtue. [2] Reason.

[3] John Chalmers, of the London Missionary Society, in Canton, has translated the work.

[4] Doolittle, Vol. I, pp, 246–250; *Middle Kingdom*, Vol. II, pp. 242–249; Nevius, pp. 114–116.

[5] Nevius, pp. 116–117.

and when recognized as one of the genii, added, "When the reality is all over, what is it but a dream?" The young scholar determined to renounce the world, and his unearthly visitor offered to aid him in getting the thousand degrees of merit needed to become one of the genii, by enabling him to turn everything he touched into gold, so that he could relieve much want, and acquire merit speedily. "But," asked the youth, "will the gold ever revert to its original state?" "Yes, after many years." "Then," said Lu tsu, "I decline the offer, for I would not confer a transient good to be followed by disappointment." The reply was: "This magnanimity makes up the requisite amount of merit. You may be one of us now."[1]

Lue kung and Lue po, the thunder god and his wife, are also idols of Tauism. He has a beak, wings, and claws, and holds in his hands a hammer and drum, with which he makes the thunder. His wife has mirrors on her hands and feet, whose reflections, when moved, produce the lightning.[2]

The "Three Pure Ones," who teach men, are supposed to be one form of Laots. The "Three Rulers," *i. e.*, of heaven, earth, and sea, are indispensable gods of Tauism. They are described as a "trinity in unity."[3]

The dragon, also, a prominent object of worship in China, is another god of the Tauists.[4] His domain includes every watery surface of sea or pond, and every living thing in the waters; also the rain.[5] The throne of China is the dragon throne. A dragon is the royal coat of arms, and is counted a real existence; and under him are inferior dragons, as subordinates under an emperor, the dragons even supposed to have literary examinations, like Chinese *literati*.

The Tuti P'usah,[6] the lowest of the gods, is, for that reason, the most popular among the masses. Every neighborhood, hill, and bridge has one of its own.[7]

The Tauist priests are comparatively few, and while the Buddhists seek[8] after Nirvana, these seek to become a sien jin, or one of the genii. Even animals are supposed to have power to attain the same condition. The Tauists have ceremonies both for warding off evil and recovering from sickness, and also for inflicting evil on men through the genii.[9] Their temples are comparatively few, because they do not offer a deliverance from evil.[10]

Dr. Edkins devotes a very interesting chapter[11] to Buddhism and Tauism in their popular aspects, showing how the latter, with its magical superstitions, promotes popular delusions — though the massacre at Tientsin grew out of hatred of the French, the delusion about their getting children's eyes for medicine, and official playing on popular ignorance.

He also has a very full and philosophical account of the geomancy of China, or their wind and water superstition, called Feng Shui, which richly repays perusal.[12]

These three religions are not professed by different and opposing sects, but

[1] Nevius, p. 118. [2] Do., p. 119; Doolittle, Vol. II, p. 301. [3] Nevius, p. 120.
[4] Do., pp. 120-123; *Middle Kingdom*, Vol. I, p. 267, 309; Doolittle, Vol. I, p. 292, Vol. II, pp. 118, 119, 264-267. [5] *Missionary Herald*, 1876, p. 376.
[6] Earth god. [7] Nevius, p. 123; Doolittle, Vol. II, pp. 455-456. [8] Nevius, p. 125.
[9] Do., p. 126. [10] Do., p. 129. [11] *Chinese Buddhism*, pp. 380-397.
[12] Do., pp. 327-352. See also *Middle Kingdom*, Vol. II, p. 264.

each person forms an eclectic religion of his own, partaking more of this, or that, according to his individual preference; and this course is favored by the fact that they are supplementary to each other. Confucianism has to do with morals in this life; God and our relations to him, a future existence, and our own destiny there hardly entering into its sphere of thought. Buddhism, on the contrary, has much to do with the idea of God and a future state. Yet, as it favors seclusion from society, Tauism comes in to supplement this deficiency, by its filling earth, and sea, and sky, with gods who care for the wants of this present life. In their fundamental characteristics, Confucianism is moral, Buddhism metaphysical, tending to fanaticism, and Tauism materialistic, tending to superstition.[1]

The only forms of worship which are universally adopted, are ancestral worship, the worship of the kitchen god, and the worship of heaven and earth on New Year's day. Let us look a moment at each of these.

Ancestral worship was practiced long before Confucius, and sanctioned by him. It is the oldest and most deeply rooted form of idolatry in China. It is deemed essential to filial piety, and children engage in it, hoping thus to win the favor of deceased parents and enjoy their protection. The objects worshiped are wooden ancestral tablets, about a foot in height, recording the names and the hour of the birth and death of their progenitors, with the names of their sons. It is supposed that each man has three spirits;[2] one of which dwells in this tablet, another in the tomb, and the third in Hades. They also worship the portraits of deceased parents, taken after death. The worship consists of prostrations, offerings of cooked food, the burning of candles, incense, and paper money; also theatrical plays. Family temples are like other temples, only, instead of idols, are these tablets ranged on shelves across the building, and from the floor upward. These tablets sometimes date back a thousand years. The openly immoral are neither allowed to worship or be worshiped after death. These temples, if we include single rooms in the dwelling-house set apart for this purpose, are very numerous in China, and constitute it the most sacred spot of earth to a Chinaman. Here rest the spirits of his ancestors, and here he expects his own spirit to find rest, and share in the homage of his posterity.[3]

The worship of the kitchen god is equally ancient and universal. He has no temple, or image, but his picture is the household deity of China, who notes all that transpires in the family during the year, and near its close reports it to the chief of the gods. On that night, five days before New Year, they make him a feast, so that his report may be as favorable as possible, and at the close his picture is burned, and so dismissed to the gods, and a new one installed for the coming year.[4]

The state worship is that prescribed by the book of rites, for all rulers from the emperor down. The people have no part in it, and it is the most formal

[1] Nevius, 149–152; Doolittle, Vol. I, 236–253. [2] Compare the similar belief of the Dakotas, p. 260.

[3] Nevius, p. 132; *Middle Kingdom*, Vol. II, pp. 259, 268–270; Doolittle, Vol. I, pp. 86, 96, 222, 229, Vol. II, pp. 45, 372, 388, 424.

[4] Nevius, p. 134; *Missionary Herald*, 1875, pp. 241–242; Doolittle, Vol. II, pp. 81–85, 185, 186.

of all Chinese worship. It is offered to three classes of objects: First, to heaven, earth, spirits of deceased emperors, and gods of the land and grain. Second, to the sun and moon, the deceased spirits of former dynasties, Confucius, patrons of agriculture and silk culture, gods of heaven and earth, and of the year. Third, to the spirits of deceased physicians, philanthropists, statesmen, and martyrs to virtue; also to clouds, rain, wind, thunder, mountains, and rivers.[1]

The whole number of temples in China may be estimated at one million, costing from $500 to $100,000 each. Of these, more than one third are for ancestral worship, about one third for the state worship, and the remaining third for Buddhist and Tauist deities.[2] Dr. Williams[3] speaks of fifteen hundred and sixty temples of Confucius, where sixty-two thousand six hundred and six pigs, rabbits, sheep, and deer are annually offered on the altars and eaten by the worshipers.

To these accounts of Chinese religious belief the writer adds the following very remarkable prayer, offered by the emperor, Taou Kwang, July 25, 1832, copied from the *Chinese Repository*, Vol. I, p. 236:[4]

Kneeling, a memorial is hereby presented to cause affairs to be heard.

Oh, alas! Imperial Heaven, were not the world afflicted by extraordinary changes, I would not dare to present extraordinary services. But this year the drought is most unusual. Summer is past, and no rain has fallen. Not only do agriculture and human beings feel the dire calamity, but also beasts and insects, herbs and trees almost cease to live.

I, the minister of heaven, am placed over mankind, and am responsible for keeping the world in order, and tranquillizing the people. Although I cannot now eat or sleep with composure; though I am scorched with grief and tremble with anxiety, still no genial showers have been obtained.

Some days ago I fasted, and offered rich sacrifices on the altars of the gods of the land and of the grain, and had to be thankful for slight showers; but not enough to cause gladness.

Looking up, I consider that the heart of heaven is benevolence and love. The sole cause is the daily deeper atrocity of my sins, but little sincerity, and little devotion. Hence my inability to move the heart of heaven, and bring down abundant blessings.

Having respectfully searched the records, I find that in the twenty-fourth year of Keenlung, my imperial grandfather, the high, honorable and pure emperor, reverently performed "a great snow service." I feel impelled by ten thousand considerations, to look up and imitate the usage, and with trembling anxiety, rashly assail heaven, examine myself, and consider my errors; looking up, and hoping that I may obtain pardon.

I ask myself whether in sacrificial services I have been disrespectful? Whether pride and prodigality have had place in my heart, springing up there

[1] *Middle Kingdom*, Vol. II, pp. 233-240; Nevius, p. 135; Doolittle, Vol. I, pp. 353-375.
[2] Nevius, p. 153.
[3] *Middle Kingdom*, Vol. II, p. 239.
[4] Do., Vol. I, pp. 369-371.

unobserved? Whether, through the lapse of time, I have grown remiss in attending to the affairs of government, and have been unable to attend to them with that serious diligence and strenuous effort which I ought? Whether I have uttered irreverent words and deserved blame? Whether perfect equity has been observed in meting out rewards and punishments? Whether in raising tombs, and laying out gardens, I have distressed the people and wasted property? Whether in appointing officers I have failed to select fit persons, and thereby government has become vexatious to the people? Whether the oppressed have found no means of appeal? Whether in persecuting heretical sects, the innocent have not suffered? Whether the magistrates have refused to listen to the affairs of the people? Whether in the wars on the western borders there have been the horrors of human slaughter for the sake of imperial rewards? Whether the largesses bestowed on the afflicted southern provinces were properly applied, or the people left to die? Whether the efforts to exterminate or pacify the rebels of Hunan and Kwangtung were properly conducted, or whether the people were trampled down as mire? To all these topics I ought to lay the plumb line, and strenuously seek to correct what is wrong, still recollecting that there may be more faults than have occurred to my thoughts.

Prostrate, I beg imperial heaven, HWANG TIEN, to pardon my ignorance and stupidity, and to grant me self-renovation, for myriads of innocent ones are involved by me, a single man. My sins are so numerous it is hard to escape from them. Summer is past, and autumn come; to wait longer is impossible. Knocking head,[1] I pray imperial heaven to hasten and confer gracious deliverance, a speedy and divinely beneficial rain; to save the lives of the people, and in some degree redeem my iniquities. Oh, alas! Imperial heavens, observe these things! Oh, alas! be gracious to them! I am inexpressibly grieved and alarmed. Reverently this memorial is presented.

Dr. Bridgman, who translates this, adds: "It is very remarkable that none of the priests of Taou, or Buddha, were ordered to pray, as has been usual on similar occasions — showing in how low estimation they are held by the emperor." Dr. Williams adds that heavy showers followed the imperial supplication the same evening, and appropriate thanksgivings were ordered, and sacrifices presented before the six altars of heaven, earth, land, and grain, and the gods of heaven, earth, and the revolving year.[2] Does not this prayer of a Chinese emperor illustrate the apostolic teaching, that the heathen, having not the law, are a law unto themselves, who show the work of the law written on their hearts; their conscience also bearing them witness, and their thoughts the meanwhile accusing or else excusing one another? Romans ii: 14–15.

Does it not also show how the invisible things of God, from the creation of the world, are clearly seen; being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse? Romans i: 20.

[1] *i. e.*, on the ground.

[2] *Middle Kingdom*, Vol. I, p. 371.

DRUSES.

After recounting the information missionaries bring to us of the inhabitants of large empires, where other churches, and even different nations labor side by side, it would seem inconsistent in a volume devoted to the work of the American Board, to pass by the Druses of Mt. Lebanon, where, for so many years, that society was sole occupant of the field.

Their Territory. The Druses occupy Mt. Lebanon from its southern extremity, opposite Sidon, as far north as the latitude of Beirût—or, from Jezzin to the Metn; yet they are not the exclusive occupants of that section. Maronites and Greeks share it with them. They have one hundred and twenty villages of their own, and share about two hundred and thirty with these Christian sects. They also extend from the southern part of this district across the Litany into Wady et Teim, on the southwest of Jebel esh Sheikh. Besides this, they are found in El Bellan, on the opposite side of the same mountain, and in the Hauran, in smaller numbers; also in Jebel el Aala, towards Aleppo, and in the mountains of Safet. A few also live in Ras Beirût.

Population. Volney estimated them at one hundred and twenty thousand; but this estimate was too large. Rev. Mr. Connor made their number seventy thousand,[1] and so did Dr. Anderson;[2] also Mr. Bird.[3] Others have put them at one hundred thousand. Col. Churchill says sixty thousand,[4] and Rev. J. Wortabet, the son of one of our church members at Beirût, a graduate of our schools, and for a time the pastor of the church at Hasbeiya, but now a professor in the Syrian college, makes them only fifty thousand. The writings of such an one may surely be counted among the contributions of the American Board to literature.[5] He divides the Druse population as follows: Mt. Lebanon, twenty-seven thousand; Wady et Teim, seven thousand; El Bellan, Damascus, etc., four thousand; El Hauran, eight thousand; mountains of Safet and Acre, fifteen hundred; Jebel el Aala, two thousand; and Ras Beirût five hundred.

Race. The Druses are Arabs, descended from the Beni Hummiar, who emigrated from Arabia to Irak Ajemi two hundred years before Mohammed. In his day they occupied Jebel el Aala, near Aleppo, and in the year 821 A. D., under the emir Fowaris Tnooh, emigrated to southern Lebanon, then comparatively waste. Abeih became the center of the Beni Tnooh. The Beni Raslan settled round Shweifat, and the Beni Shweizan in the vicinity of Deir el Kamr. The Beni Rabeea followed, under the emir Maan, in 1145, and settled in Bakleen, in a district called the Shoof, or "Lookout," because it was a post of obser-

[1] *Missionary Herald*, 1821, p. 31.
[2] *Oriental Churches*, Vol. I. p. 236.
[3] *Missionary Herald*, 1832, p. 325.
[4] *Mt. Lebanon*, Vol. I, p. 104.
[5] To his *Researches into the Religions of Syria*, a volume which furnishes much of the material for this notice of the Druses, and his works on Anatomy and Physiology, may be added among the same contributions of the Board, the works written by Naseef el Yazijy, Michael Meshaka, Butrus el Bistany, and others. See Appendix II, under the issues of the press at Beirût.

vation against the Franks, who passed along the coast to and from the Holy Land.

Religion. To understand this we must go back to previous religions; for *outré* as the tenets of the Druses are, there is hardly one that has not been adopted from some previous Oriental belief, with more or less of modification, and it is hard to say which is the more extravagant — the creed of the Druses, which seems to have concentered in itself the extravagances of many previous ones, or some of its predecessors, which were made up of nothing else.

The primary principle of the ancient Persians was the Zerwane Akerene, or endless time. Everything except this was made. Time was the creator, itself infinite, absolute, eternal. And the Druses believe in a God without attributes; for his attributes are, according to them, other personalities who emanated from him — as the Universal Intelligence, the Universal Soul, the Will, the Word, Justice, and the like. They hold that he can neither be comprehended nor described.

Col. Churchill says:[1] "None can define his essence. Imagination cannot grasp him. The eyes even of those who look on him cannot comprise him. The most profound reflection cannot comprehend him. Human reason cannot attain to a knowledge of his works, and confesses its utter inability to understand even that which it knows of him — his incarnation." Hamzé addresses him as "indefinable in thy essence, whom no description can reach, and to whom no quality is applicable." In another place, "who art exempt from all qualities,"[2] which is a very different thing from a God whose *ways* are past searching out. Compare with it the Gnostic idea of God as "the unfathomable abyss," locked up within himself, unnamable, incomprehensible, to whom Basilides would not even ascribe existence.[3]

With them, every other attribute seems to be lost in his unity. Worship, according to them, consists in a thorough apprehension of this one idea, and perfection is a mystical absorption of thought and feeling in this unity. Hence they call their religion Unitarianism, and themselves Unitarians. The ancient Persians also believed in a good god, Auramazda, and in a god of evil, Ahriman, and the Druses believe in ministers — for so they style the personified divine attributes — that are good, and others that are evil. The Intelligence created from the essential light of God is good. He is also called "The Cause of Causes," but he sinned in looking on the glorious light of which he was formed, with complacency, and therefore God created another minister out of him, called "The Antagonist,"[4] pure darkness out of pure light, who, when required to obey the Universal Mind, refused, and so became a rebel. The Mind seeing the evil he had done, repented, was forgiven, and God gave him for associate the Universal Soul, created partly from the light of the Mind, and partly from the darkness of the Antagonist. The Antagonist then felt the need of a companion, and God created the Foundation, or Companion, out of the Mind, the Antagonist, and the Soul, who refused to obey the Mind and

[1] *Mt. Lebanon*, Vol. II, p. 5.
[2] Do., Vol. II, pp. 6 and 58.
[3] Schaff's *History of Christian Church*, Vol. I, pp. 227 and 237.
[4] Compare Satan = Adversary.

Soul, and took the part of the Antagonist. Compare with all this the Gnostic idea of God sending forth the Æons from his bosom; that is, the attributes and unfolded powers of his nature; the ideas of the eternal spirit world, such as mind, reason, wisdom, power, truth, and life — who, according to Valentine, emanated in pairs, with sexual polarity.[1] It is curious that the Druses hold to the same idea, even to maintaining that the same person is male in relation to one, and female in relation to another. Thus the Soul is female in relation to the Universal Mind, but male in respect to the ministers that were created afterwards; such as the Word, the Preceder, and Succeeder.[2] So in matter heat and cold stand in this sexual relation to each other.[3]

The souls of men, they hold, were created at the same time and in the same way as the Word, the Preceder, and Succeeder; and as the Universal Soul was derived both from light and darkness, so are the souls of men. They also hold that the number of souls in existence has never varied from the first moment of creation until now, nor will there be either increase or decrease in the future. As they think the soul incapable of knowing without a corporeal form, bodies were also created at the same time and in the same number, so that at once the world was peopled with infants, adults, and old men and women, just as it is today. Of course, with them, our race is not descended from one Father.[4] And this carries with it the doctrine of Metempsychosis, or the reappearance of the same soul in different bodies, which is the only tenet of the Druses that they openly acknowledge. They compare it to a change of garments, or pouring water from one vessel into another, and advance in proof of it, the manifest inequality of human conditions in this life, to be explained, they say, only by the conduct of the same soul in a preceding body. So they say Christ affirmed John the Baptist to be a reappearance of the soul of Elijah, and they ask how could the blind man have sinned, so as to be born blind, if he had not sinned in a preëxistent state; thus antedating some American opinions. They tell a thoroughly Arab story of a child five years of age, going from Jebel el Aala to Damascus, and recognizing his surroundings in a previous life as a rich man in that city, even to pointing out a debtor who had not acknowledged his debt, and unearthing a sum of money he had hidden in the floor of a cellar.[5] While the Ansaireeans believe that the souls of the wicked go into the bodies of brutes, the Druses hold that they can go only into human bodies. "For," says Hamzé, "it is contrary to divine justice that a man, endowed with reason, should be punished as a dog or pig, which has no conscience, and could have no idea of its fault."[6]

The Doketae denied the true incarnation of the Redeemer, and maintained that his body was not real, but only an appearance; and so the Druses, while they teach that God has appeared in human form, affirm that it was only as a phantom, having neither flesh nor blood, nor any property of matter, except the outward form. They compare it to the reflection of a human body in a mirror,

[1] Schaff's *History of the Christian Church*, Vol. I, pp. 228 and 240.
[2] Churchill's *Mt. Lebanon*, Vol. II, p. 71.
[3] J. Wortabet's *Religions of Syria*, p. 305.
[4] Churchill's *Mt. Lebanon*, Vol. II, pp. 171–173; J. Wortabet's *Religions of Syria*, pp. 304–306.
[5] J. Wortabet's *Religions of Syria*, pp. 307–309.
[6] Churchill's *Mt. Lebanon*, Vol. II, p. 177.

and affirm that it was only intended to convey to men the idea of God, since otherwise they could not have known him. Instead of saying, "He became flesh," they use the expression, "He veiled himself," or, took for a veil the noblest of his creatures, and maintain that he has existed from eternity in a human form.[1] They say that this veil has been assumed ten times: in El 'Alee, El Bar, Abu Zakarieh, 'Ali, El Mu'il, El Ka'im, El Mansur, El Mu'iz, El Aziz, and El Hakem bi amr Allah.[2] They speak of sixty-nine appearances between El 'Alee and El Bar, but these were probably of the ministers and not of the deity. They say that after each appearance were seven religions, and after each religion seven ministers, each one of whom continued one hundred thousand years: after the second appearance, Enoch, whose wife was Seth, and after him other ministers taught the unity of God. Then there appeared seven teachers: Noah, Abraham, Moses, Jesus, Mohammed, Mohammed the son of Ismail, and Saeed. These were all appearances of the Antagonist, *i. e.*, of Satan, and founded seven religions, which literally understood were false, but allegorically interpreted, in accordance with the Druse ideas, were true. No wonder the Druses hide their opinions from the Moslems when they teach that Mohammed and Jesus Christ were both incarnations of the devil. It will be noticed that while there were only two appearances of God from the creation down to the time of Mohammed, son of Ismail, about 150 A. H., or, 762 A. D., there were no less than eight between him and El Hakem, who was born A. H. 375 = A. D. 987.

In speaking of Noah, Abraham, Moses, and Jesus, Hamzé says: "These may be counted among those who possessed temporal learning and knowledge, such as medicine, philosophy, geometry, astronomy, and rhetoric; but they taught men a vain and empty worship. They knew not the Lord, whose name he glorified. They only knew the Preceding;[3] that was the height of their attainment. It was he and 'the Following'[4] at the same period, who furnished them with instruction. And though the Universal Intelligence and the Soul were present among them, they knew them not."

Then, as if this was not blasphemy enough, in their catechism they go beyond those Gnostics, who taught that the redeeming Æon, called Jesus, united himself with Jesus Christ at the baptism and forsook him at the passion;[5] for that says: "The Gospel is true, for it contains the word of the True Messiah, who, in the time of Mohammed, bore the name of Salman Faresi, and who is Hamzé, son of Ali. The false Messiah is he who was born of Mary, for he is the son of Joseph. The true Messiah was one of his disciples; he dictated the words of the Gospel, and instructed the son of Joseph, prescribing to him the rules of the Christian religion, who at first received his instructions with docility, but afterwards disregarding them, the teacher induced the Jews to crucify his disobedient pupil. Then the true Messiah stole him from the grave and hid him in the garden, spreading abroad the report that he had risen from the dead. It was Hamzé, also the slave of our Lord Hakem, who entered the place where the disciples were assembled, the doors being closed for fear of the Jews."

[1] Churchill's *Mt. Lebanon*, Vol. II, pp. 63, 66. [2] Wortabet, p. 317; Churchill, Vol. II, p. 44.
[3] Who in the fifth century of the era of the Hegira was Selama, son of Abdelwahab.
[4] Moktana Bohaeddin. [5] Schaff's *History of Christian Church*, Vol. I, p. 230.

It is well known that ancient kings were so often assigned a place among the gods that the word Apotheosis was coined to express the idea. And some of the Roman emperors arrogated to themselves this honor while yet in the flesh. Simon Magus also gave himself out for a sort of emanation of deity. "He is said to have declared himself an incarnation of the creative world spirit,"[1] but it was reserved for the Druses to exalt an insane tyrant to the throne from which they sought to cast down the Son of God. It is instructive to see how God can punish such audacity by simply leaving its perpetrators to themselves. Let us look at the god of these Druses.

Abu Ali el Hakem bi Amr-illah was born A. D. 987, and ascended the throne of the Fatimite Caliphs when only eleven years old. His reign of twenty-five years was distinguished for its madness and cruelty. The first five years were noted for the capricious change of his public officers. In the year A. D. 997 Ibn Ammur was dismissed from the office of Waseet,[2] and afterwards put to death. Bardjewan, the tutor of the young king, who procured his dismissal, and succeeded to his office, was himself assassinated in Hakem's presence and by his consent, because he would not allow him to take rides for pleasure. In the year A. D. 1001 he persecuted the Sûnnees and the Christians. One of these last was Abu el Naja, a courtier, who, because he would not turn Moslem, was sentenced to receive one thousand lashes. When eight hundred had been inflicted, he asked for a drink of water. It was offered on condition of his becoming a Moslem. He refused, saying, "Christ has given me water to drink," and expired; but El Hakem ordered the rest of the lashes to be laid on the dead body; and this was not the only instance of the kind.[3] Col. Churchill tells of the patriarch Isa, who was tortured to death. He now stuck up on the walls of the mosques, large inscriptions in golden letters, anathematizing Ayescha, the wife of Mohammed, Abu Becr, Omar and Othman.[4] One day his horse took fright at a dog, and forthwith every dog in Cairo was killed.[5]

He filled a large magazine with reeds, rushes, and acacia wood, and his public officers, fearing they were to be burnt alive, implored his mercy. Colleges were established, and libraries, at great cost, opened free to the public, and then destroyed. Professors were invited to teach in them, and then cruelly butchered.[6] Five hundred churches and convents were destroyed.[7] Women were not allowed to appear outside their houses, or even to look out at the windows, and shoemakers were forbidden to make them shoes. One day, hearing a noise in a bath, as he passed, he found it was occupied by women, and on the spot he had the doors and windows walled up, and those inside left to perish of starvation.[8] Old women were employed to report who was absent from the harems. The absentees were immediately escorted to the palace by soldiers, and when enough were got together, the whole of them were sown up in bags and thrown into the Nile. At one time the gates of the city were ordered to be open all night and closed all day. At another, the doors of

[1] Schaff's *History of Christian Church*, Vol. I, p. 235.
[2] Mediator.
[3] Wortabet, p. 292.
[4] Churchill, Vol. I, p. 360.
[5] Do., p. 362. Wortabet, p. 293.
[6] Wortabet, p. 293.
[7] Churchill, Vol. I, p. 366.
[8] Do., Vol. I, p. 368.

shops and houses were to be left open at night, with a promise of indemnity in case of loss. In one night four hundred articles of value disappeared, and the men whom he had sent to steal them were hung for the theft, on the accusation of a statue, within which he had concealed a man to give the proper answers to inquiries about the losses.[1] One day he dismounted in front of the mosque, knocked down an attendant, and ripped him open with his own hand; and it was his custom when he put any one to death to make the family spend the night with the dead body.[2] Irritated by a practical joke of the women, Nero-like,[3] he ordered his soldiers to sack the city, massacre the citizens, and burn their houses; and one third of the city was reduced to ashes, and half of it plundered, while multitudes were slaughtered, and their wives and daughters given up to the soldiers.[4] He employed old women to go round and gather up family secrets, and then sought to establish a reputation for omniscience by retailing them to those concerned. And this is the man whom the Druses worship as the latest manifestation of God! A madman, who so wore out the patience of his suffering people that he was assassinated during a morning ride, in the year 1021 A. D.

If any ask how it is possible for men to be so given over to believe a lie, the answer is: that previous to his day, Moslem sects had sprung up, who discarded the literal meaning of the Koran, and insisted on interpreting it allegorically. In other words, under that pretext, they put their own meaning on its phrases, and this mode of exposition having been established, Hamzé, who belonged to one of these sects, and is the real founder of the Druse religion, explained all the insane freaks of El Hakem in the same way. The most atrocious madness was only an allegory, intended to convey a recondite truth.

It speaks well for the Egyptians that, when Mohammed ibn Ismail El Dorazy undertook to read his book in the mosque at Cairo, affirming that El Hakem was a manifestation of God, the indignant people rose and slew many of his followers, though he himself, protected by his patron, fled to the Wady et Teim, and there, partly by the free use of money from Egpyt, and partly by the license he gave to lust, succeeded in securing adherents among a people[5] already trained to believe in this allegorical interpretation of the Koran.

The Batenites,[6] literally the Esoterics, taught that there were five ministers on earth: The Natek,[7] Asas,[8] Iman,[9] Hodja,[10] and Dai;[11] and in many other of their teachings there was a close resemblance to, or even identity with, those of the Druses. The Druses have seven commandments, designed to supplant the seven requirements of Mohammed: (1.) Veracity. This takes the place of prayer, but it is required only towards those of their own religion. To all others they are at liberty to lie without stint, and it must be confessed that in this practice has made them perfect. No confidence can be put in the word of a

[1] Churchill, Vol. I, p. 382. [2] Do., Vol. I, p. 385.
[3] Do., Vol. I, p. 374. [4] Do., p. 376.
[5] The Katebites allowed wine and fornication, or anything else forbidden by the law, and denied the need of prayer. Churchill, Vol. I, p. 309.
[6] Arabic, Batenieen. [7] Prophet. [8] Foundation. [9] Leader.
[10] Teacher. [11] Caller.

Druse when it is for his immediate interest to tell a lie. It is doubtful whether there is another people on earth accustomed like them to conform to the prevailing religion; not through compulsion, but from policy; go through with its observances of worship, repeat its creed and its prayers, while at heart they hate and renounce them all, and do so openly as soon as it is for their interest to pretend to accept a different one. It is the inevitable consequence of this utter duplicity that Druses are very rarely converted. Again and again have they made a great show of interest in the truth, begged for schools, and appeared to hunger for the bread of life; but the simulated zeal passed away with the political occasion that called it forth. The writer cannot speak for the present state of things in Syria, but long after he retired from the field, one family and one young woman were the only fruits of extensive and protracted missionary labors among the Druses of Lebanon. (2.) Love to their co-religionists. This takes the place of alms-giving. (3.) Renouncing the worship of idols. This takes the place of fasting. (4.) Repudiation of devils and delusions. This means other religions, such as Mohammedanism and Christianity, and it is instead of pilgrimage to Mecca. (5.) Profession of the unity of God in the Druse sense. (6.) Secresy in religion, including every method in which it is possible to conceal their true belief. Jesuits might go to school to them in this department. And (7.), resignation to the will of God.[1]

The Druses believe in what they call a resurrection; not a raising up of the dead, but a period of judgment, ushered in by war between the Moslems and the Christians; and while their armies are preparing for a great battle near Mecca, an army of two million five hundred thousand Unitarians[2] from China, under the command of "the Universal Mind," and the five ministers will approach, to which both the Moslem and Christian army will surrender. Then El Hakem will reappear, and, at his command, thunders will raze the very foundations of the Kaaba. The five ministers, on thrones of gold, will then judge the world. The sins of Druses will be forgiven, costly gifts of clothing, weapons, and horses will be bestowed on them, and they will traverse the earth, everywhere killing the infidels and plundering their treasures. Thenceforward they will be supreme, and all others will be in poverty and servitude, each wearing a badge of subjection.[3]

In such teachings we find an explanation of the atrocities of 1860 in Lebanon and vicinity. The story is too horrible for recital. Let one act in the bloody drama suffice. Osman Bey, the Turkish governor of Hasbeya, at the instigation of Sitt Naaify, sister of Saeed Bey Jumblatt, demanded the arms of the Christians, then refugees in the castle of the town, and they were given up on the faith of a written guarantee pledging their personal safety. Then they endured the double misery of imprisonment and starvation; their ordinary food was bran, dried beans, and vine leaves. The women tore off their ornaments and gave them to the soldiers to move their pity. They pleaded in vain to Sitt Naaify. No tears or entreaties touched her heart. Ali Hamadi, a Druse chief, interceded for them. "No," said she, "my brother's orders are that not a Christian is to be left alive from the age of seven to seventy." The castle was

[1] Wortabet, p. 319–322. [2] Druses. [3] Wortabet, pp. 322–326.

three stories high, with chambers and corridors round a central court. The Christians, under the promise of a safe conduct to Damascus, were scattered through the corridors, gathering together the remnants of their property in order to commence the journey. They were all ordered into the great central court, the Turks prodding them with their bayonets as, weak and faint, they reeled along. As soon as the soldiers left the helpless crowd, the butchery began. The Druses first fired a volley into the mass, and then sprang on their victims with axes and yataghans. The first victim was Yoosuf Reis. He clung to Osman Bey, to whom he had paid two hundred pounds for protection. The ruffian kicked him on the mouth, and he was cut up piecemeal, beginning with the extremities. He was secretary to the Emir Saad ed Deen, who was next beheaded; and so the mass was hewn into from the front. Many had lips and ears cut off before the final blow. Mothers vainly sought to hide their sons, and, failing in that, clasped them in their arms, only to have the yataghans strike through them both. And so the work went on. A prominent member of the Protestant church was butchered while on his knees in prayer; others of that church, while exhorting their fellow-sufferers to trust in Christ, though the name only called forth the taunt: "What can he do for you now? Don't you know God is a Druse?" Truth, however, requires the statement that the massacre was free from the atrocious vileness toward the women that marked similar scenes that year, when the Turks were the principal actors; for the Druses, as a race, are opposed to immorality.[1]

The Druse era is 408 A. H. = 1020 A. D., the first year of the appearance of Hamzé. Their sacred books are contained in six volumes, containing one hundred and eleven treatises, written by Hamzé and the other four ministers, in imitation of the style of the Koran; but only an imitation.[2] In later times their learned men have written other books. They were kept secret till the wars of 1837–1842, when some of them were plundered, and translated in France, by M. Sylvestre de Sacy.

The Druses are divided into the Juhhal,[3] forming the mass of the community, and the Ukkal,[4] who alone are initiated into the knowledge of their creed. The form of initiation, which is always dated — month and — year of the servant of our Lord, whose name be glorified, Hamzé, son of Ali, son of Ahmed, reads as follows:

"I ———, son of ———, in sound reason, and with full preference, do now loose myself from all religions which contradict that of our Lord El Hakem of infinite power, and confess that there is no God in heaven, or Lord on earth, save our Lord El Hakem (may his name be exalted!). I give myself, soul and body, to him, and engage to submit to all his orders, and know nothing but the obedience of our Lord, who appeared in Egypt in human form. I shall render the homage due to him to none else — past, present, or to come. I submit absolutely to his decrees. I shall keep the secrets of my religion, and speak of them to none but Unitarians. If I ever forsake the religion of our

[1] Churchill, Vol. IV, pp. 168–173; *Missionary Herald*, 1860, p. 250.
[2] Wortabet, p. 298.
[3] Ignorant.
[4] Wise.

Lord, or disobey one of his commands, may I be separated from the adored Creator, and from the privileges of the ministers; and I shall justly deserve immediate punishment."[1]

There is a higher class of Ukkal, called Iwayid.[2] All the Ukkal dress simply,[3] and abstain from profanity, obscenity, intoxicating drinks, and tobacco; and they may not eat in the house of a ruler, or partake of anything obtained by extortion; but the Iwayid dress still more plainly. Their turban is a narrow strip of white cloth wound round a red cap in a spherical form, and their coat is of home-spun wool, striped black and white. Their manner and style of speaking is very sanctimonious. They never engage in trade, but cultivate the soil. They are kind and hospitable, and resigned in sickness and affliction, yet their creed recognizes no act of mercy or deed of kindness as acceptable to God, only as it wins esteem for themselves and their religion. An Akil was once imprisoned in the house of the governor, for murder, and while there sent to another house for water to drink, because he would not drink from a vessel which was the wages of unrighteousness. The worst thing about the murder, in the Druse mind, was the scandal it occasioned to their religion.

The Druses hold their meetings in khalwehs,[4] *i. e.*, places for secret meetings — rude stone structures, containing a few mats, and sometimes accommodations for strangers who are Druses. They meet on Thursday evening, which with them belongs to Friday, when they read, or rather chant, their sacred books, and sing hymns expressive chiefly of joy in the prospect of the resurrection already described. They have simple refreshments, and in the khalweh at Neeha a lamp is kept burning night and day. Prayer they do not offer, except rarely in private; and after the chanting and singing is finished, politics, and Druse national interests form the subject of discussion. Here all plans of policy in peace, and campaigns in war, are discussed and settled, so that, though few, they maintain a unity in action, which more than makes up for the lack of numbers, and secures to them the control of southern Lebanon. They have secret signs and passwords. One is the question: "Where do farmers in your country sow the seeds of the *mysobalanus?*" and the answer is: "In the hearts of believers."[5]

Polygamy or concubinage is not allowed among them, nor can a wife once divorced return to her husband.[6] The wife is held to be in all respects on an equality with the husband. If the divorced wife is to blame for the separation, the husband retains half of her property; if otherwise, she takes the whole of what she possesses in her own right.

A woman may become an Akileh, but she must not be exposed to view in the khalweh. (For their strict ideas of propriety see Churchill, Vol. II, pp. 168, 237–242, 262.) The Druses are very proud, and among themselves quarrels relating to matters of etiquette are frequent. An Akil never begs, and a poor Druse would rather put himself in the wrong than have it supposed that a Christian dared to initiate a quarrel with him without first having been insulted.[7]

[1] Wortabet, p. 329. [2] The engaged. [3] Wortabet, p. 330. [4] Do., p. 335.
[5] Do., p. 338. [6] Churchill, Vol. II, 294. [7] Do., Vol. II, p. 324.

Churchill speaks of the *hauteur* and self-sufficiency expressed in their demeanor.[1] The self-conceit of Hamzé may be seen in his statements: "I am the root of the creatures of God, distinguished by the gift of his wisdom. I am the way and the truth. I am he who knows his will — I am the master of the last trumpet. It is through me that men become acceptable before God, and enjoy his presence. I am he who abrogates all preceding laws. Through me all grace flows, and vengeance will fall on the polytheists. I am the chief of the age."[2]

According to their writers, the door was closed twenty-six years after the beginning of their era[3] against all accessions to their number from without, so that since 1056 A.D. no one not then a Druse has become one. It has been supposed that the Druses worship a calf, because the image of that animal has been found in their khalwehs; but it is a symbol of the Antagonist; or, as we would say, Satan, and also of his emissaries.

THE PAPAL SECTS IN SYRIA.[4]

The Maronites. These are found in most of the cities of Syria, a few in Egypt, and some even in Constantinople. As peasants they are found from Tripoli as far south as Safed, but the main body of them are in the districts of Besherry, Jibeil, and Kesrawan. There are also a few in the north of Cyprus, but of two hundred and twenty thousand souls in all, one hundred and eighty thousand are in Mt. Lebanon. Their nobility is of two grades: (1) *Emirs*, of the family of Shehab in the Druse part of Lebanon, and of the family of Abi el Lemá in the Metn; and (2) *Sheikhs*, of the families of Khazin Habeish and Dehdah, in the Kesrawan and Futuh.

They are of Syrian origin, and their liturgy is still in Syriac, though as they speak Arabic, their Scripture lessons are translated into that language, but written in the Syriac character called Syro-Arabic, or Karshuny. Other peculiarities point them out as the relic of a distinct nation.

Their head is a patriarch styled "Patriarch of Antioch and all the East," chosen from among the bishops, by themselves assembled for that purpose, and confirmed by the Pope. If no one has a majority of votes, then the Pope chooses one for them. He has no firman, and no agent at the Porte, and governs according to the canons of the Maronite council, called the council of Lebanon. He resides in summer at the convent of Kannobin, in Besherry, and in winter at that of Bkerky, in Kesrawan, both of which belong to him *ex officio*, with another called Diman. Their income amounts to one hundred thousand piasters per annum. He is also entitled to a direct tax of two piasters from every adult Maronite; but, as it is farmed out to the bishops, he receives only a part of it. Every priest pays him annually five piasters; also six piasters for every mass he performs. From all sources his income may amount

[1] Do., Vol. II, p. 251. [2] Do., Vol. II, pp. 120, 122. [3] 408 A. H.

[4] This is the substance of a communication that appeared in the *Missionary Herald*, for 1845 (pp. 314–319 and 354–357). Some of its statements are now, no doubt, obsolete; but it shows how carefully our missionaries note the facts that compose the warp and woof of history, and how accurately they can state them, going into minutiæ that would not be thought of by many, but are of inestimable value to the historian.

to two hundred thousand piasters, or about $8,000. In 1845 the patriarch was Yusuf Butrus Habeish, being a sheikh of that family.

The bishops are thirteen, of whom nine are diocesan. The diocese of Sidon extends from Akka to the Damur, and east to Anti Lebanon. Its income is twelve thousand piasters. The bishop[1] resides at the college of Mishmusheh, in Jezzin.

The diocese of Beirût extends from the Damur to Antelias. The Episcopal residence is in Beirût. Income, twenty thousand piasters. The bishop in 1845 was Tobia (Tobias) Abu Aun.

That of Cyprus extends from Antelias to Nahr el Kelb,[2] and includes the Maronites of Cyprus. The bishop, Yusuf Jàjà in 1845, resided at the college of Kurnet Shehwân, in the Kâtia, on an income of twelve thousand piasters.

That of Damascus reaches from Dog river to the middle of Kesrawan, including the Maronites of Damascus. Yusuf (Joseph) El Khazin, bishop in 1845, resided at Zûk Mikâil, on an income of ten thousand piasters.

The diocese of Baalbek extends from the middle of Kesrawan to Jibeil. The bishop, Anton (Anthony) El Khazin in 1845, resided in the nunnery of Buklush, on an income of twenty-four thousand piasters.

The diocese of Jibeil extends from Futuh to near Tripoli. Its income is fifteen thousand piasters. The patriarch is *ex officio* bishop, and governs through a vicar. Sim'an (Simon) Zuwein was vicar in 1845, and resided at the college of Mar Yohanna Maron.

The diocese of Tripoli extends north to Akkar. Bûlus (Paul) el Akury was incumbent in 1845.

The village of Ehden alone constitutes a diocese, of which Estefan ed Duweihy was bishop in 1845. In the same year Bûlus (Paul) Arutun was bishop of Aleppo, resident in that city.

These diocesans are chosen by the people, and the patriarch must approve them, unless canonically disqualified. If the diocese fails to elect, the patriarch may select one of the candidates voted for; or, in case of delay to elect, he may fix a time beyond which, if no one is elected, he will appoint one. The incomes of these dioceses are from glebes; masses, at the rate of four piasters each; tithes; and presents at baptisms, funerals, weddings, etc., and are, of course, somewhat uncertain as to amount.

In 1845 the bishops without dioceses were: Yusuf (Joseph) Rizk, vicar of the patriarch over the college of Ain Warkah; income from the college. Fillibus (Philip) Habeish, superior of the convent of Mar Jirjis 'Alma; income from the convent. Bûlus (Paul) Mas'ad, vicar and privy counsellor of the patriarch; income from the Patriarchal See; and Nikola (Nicholas) Murad, agent of the patriarch at Rome. The consecration of bishops belongs to the patriarch, assisted, however, by other bishops in the imposition of hands. They receive circular orders from him every year.

The priests are from seven hundred to one thousand. Of these, also, only some have parishes. Parish priests are allowed to marry, but only before ordi-

[1] Then Abdallah Bistany.

[2] Dog river.

nation, and if the wife dies no other can be taken. The priests are distinguished by their dress. Each parish elects its own priest, generally from among themselves. The bishop may compel an election, but cannot control the choice; he must ordain the one elected if there be no canonical objection. If the vote is inconclusive he can select one of the candidates, though the matter may be carried up to the patriarch. If a parish becomes dissatisfied with its priest, it may procure his dismission by the bishop, if the objections are valid; and the bishop also has power to suspend him for crime. Every candidate for the priesthood must know Arabic and Syriac, so far as to read it; also casuistry; and must be examined in these, and as to his moral character, by a person appointed by the patriarch. Ordination is either by the patriarch or bishop of the diocese.

The parish priest baptizes, ratifies espousals, marries, visits the sick, administers extreme unction, says mass daily for the people, reads prayers in the church at least on Saturday and Sunday afternoons, hears confessions, gives the communion, watches over the flock, and once a week reads over by himself the book of offices. They also collect the tithes for the bishop, settle quarrels and entertain strangers. Their income is from an amount of produce agreed on with the people, and received at the harvest season; two piasters for each mass, baptism, espousal, marriage, or burial, and varies from two thousand to nine thousand piasters. A committee of the parish take care of the glebes, and use the income for repairs of the church, and for schools. No priest may engage in any trade, handicraft, or other profession. They only take care of their own land, and are usually poor.

The priests without parishes are usually unmarried. Some are in the employ of the higher clergy; some are judges, and others superiors of convents. Their income is about the same as the parish priests, and is derived from their offices, masses, burials, and the like, for which they are paid the same prices as the others. These also are forbidden all secular employments. In case of sickness all priests fall back on the sect for a support, and all are exempt from the "kharaj," or poll tax.

Convents and Nunneries. Maronite convents are regular or irregular. The regular belong to the Country, Lebanon or Aleppine orders. The first of these is most numerous; the last least so. Each order has its own organization and superior general, independent of the others. Each convent has its own superior. The superior general is assisted by four managers. Under their inspection only has he the control of the pecuniary affairs of the convents. His authority is independent of the patriarch, except by appeal. The income of the superior general of the Country order is eight hundred piasters weekly for masses, one hundred and thirty thousand piasters annually from glebes, and half of the gifts to the convent of Kuzheiya; and is greater than that of the Patriarchal See. Each superior general carries the staff,[1] wears the miter, and holds the cross at high masses, but cannot ordain priests. This is done by the bishop of the diocese, who has also some rights over the convents,

[1] Crosier.

though they are so absolutely under their superior generals that these last have prisons of their own. The superior general, his managers, and the superiors of convents, together with those who have held any of these offices, constitute a convocation which meets once in three years to choose a new superior general, who may be reëlected at pleasure. The same convocation elects, also, the managers and the superiors of convents. Each superior governs his convent according to the rules of the order, and looks after its property.

The monks take the vow of chastity, poverty, and obedience, after a trial of one year in the Lebanon order, and of two years in the others. Till then, they can go back and marry, but not after they put on the cowl. No entrance fee is required. Poverty or indolence prompts the step. Their dress is a black, coarse serge gown, with cowl and leathern girdle. Silk they may not wear, nor carry more than ten piasters in their purse. If more is found on their dead bodies, they are denied Christian burial. Meat they never taste, nor do they smoke; but they eat fish and take snuff. Some plough and reap, others weave, or make shoes, and they are kept hard at work. They are generally ignorant, and very stupid. Hardly one in seven can read. The benefit of the convents to the people is extremely small; all together do not maintain more than a dozen *very* common schools. They are generally the source of ignorance, superstition, and intrigue. They are shameless beggars. Every year they swarm forth on that errand, and rarely leave a house without something, though generally better off than their benefactors. The return made is a mass on Saturday for the souls of all who help them.

In 1844 all the monks north of the river Ibrahim rebelled against their superior general. They drove away all the superiors, armed themselves, and took possession of their convents. The patriarch interfered, but they only turned against him. The emir repeatedly sent soldiers against them, but accomplished nothing. Even the mandates of the Pope fell powerless. They were supported by the communities round about them.

The irregular convents are independent of these orders and of each other. They are founded by families, and one condition is, that the superior shall belong to the family of the founder. Their superiors retain office during life, and they are all under the bishop of the diocese, who inspects their accounts.

Nunneries are also regular and irregular. The former belong to the same three orders, and must be forty cubits distant from a convent. The entrance fee varies from five hundred to ten thousand piasters. Nuns take the same vow of chastity, poverty, and obedience. They learn to read Syriac; at least, so as to assist in worship, in which they take a part, especially in chanting. Schools for children they have none. Their work is with the needle, chiefly embroidering what are called "garments of the virgin," a species of charm which they make for sale. They dress in black cotton cloth.

The irregular, or devotee, nunneries differ from the convents for males only in frequently changing their superiors. The nunnery at Aintura is subject to European rules and is supported from abroad.

The income of all the conventual establishments is estimated at six or seven millions of piasters: about one million from masses, gifts, and vows, the rest

from real estate. The old Emir Beshir Shehab is said to have given six hundred thousand piasters annually, for masses to be said for the Shehab family. The landed property of the convents is immense, and, till the civil war in 1845, was rapidly increasing. Formerly it was not taxed, but now shares the burdens of other real estate.

Then follows a list of these establishments, with an estimate of the number of their inmates in 1845, giving three convents to the diocese of Sidon, with one hundred and forty-five inmates, and one nunnery with fifteen; ten convents to that of Beirût, with one hundred and ninety-eight inmates; eight to that of Cyprus, with two hundred and fifty-nine inmates. Damascus follows, with four convents, and fifty-one monks, and eight nunneries, with two hundred and eighty-one nuns. Baalbek has seven nunneries, with one hundred and seventy-one nuns, and five convents, with sixty-two monks. Jibeil counts nine convents, with three hundred and fifty-three monks, and one nunnery, with forty nuns. In the entire list are three convents, with one hundred and twenty inmates each. The largest nunnery contains eighty, and the next in size sixty. Besides the above are many coenobia, or houses of entertainment for monks on a journey, fourteen of which are mentioned in such places as Damascus, Beirût, Tyre, Sidon, Akka, Deir el Kamr, etc. The total number of monks is eleven hundred and two, and of nuns five hundred and seven. Among the nuns are no deaconesses.

Preachers. The priests generally are unable to compose a sermon; nor do they regard preaching as a part of their duty, beyond a mere exhortation; but eight men in 1845 were authorized to go about as preachers. None others were allowed to preach without a written authorization. Generally these preachers are ordained, but not always. The patriarch, when he reclaimed the college of Mar Yûsûf Aintura from the Lazarists, increased its income to thirty thousand piasters per annum, and set it apart for the residence and support of preachers, who were to go forth teaching priests and people, and preaching and hearing confessions in the churches, always returning to the college from every circuit; but the plan, in 1845, was not fully carried out, and was even in danger of coming to nothing. Latin monks sometimes preached, but, owing to their imperfect Arabic, were neither understood nor respected.

Education. They have common schools in cities, towns, and large villages. The teachers are appointed by the leading men, the bishop, or the priests, according to their zeal in the matter. But the bishop must see that they exist. Some places have school funds; if not, the parents pay so much for each book the child learns to read. The bishop sometimes pays for the poor, and sometimes the teacher instructs them gratis. A teacher's income is ordinarily from six hundred to one thousand piasters per annum. Sometimes it is five thousand piasters. Arithmetic, grammar, and geography are not taught;[1] and the school is carried on Arab fashion, with much noise and confusion. As a result, one fourth to one third of the adult males can read in the Kesrawan; but the

[1] 1845.

education of girls is neglected. Hardly any except the daughters of the nobility can read.

Of colleges there are eight: three general, *i. e.*, they receive pupils from all quarters, three diocesan, and two conventual. The general colleges are: (1) Ain Warkah, east of Ghûsta, in the Kesrawan, originally a nunnery, founded by the family of Stefon. Sixty years ago Bishop Yusuf Stefon (Joseph Stephen) made it a college, under the patriarch, reserving to his family two free scholarships and the presidency. This last right the patriarch has now set aside, having made Bishop Yusuf (Joseph) Rizk president. The number of scholars varies from twenty to forty. Its income is from one hundred thousand to one hundred and fifty thousand piasters; (2) Rumieh, in upper Kesrawan, originally a nunnery founded by the family of Sufeir. It became a college about 1830; has from ten to fifteen students, and an income of thirty thousand to forty thousand piasters; (3) Mar Abda Her-her-eiya, in the Futûh, near Kesrawan, commenced about 1833. It was also a nunnery, founded by the house of 'Asaf; has from twenty to twenty-five scholars, and an income of one hundred and fifty thousand to two hundred thousand piasters. The funds of these colleges are invested largely in real estate. Each diocese sends two free scholars, nominated by the bishop; others, also, are beneficiaries; but these, when sixteen years of age, take an oath of obedience to the patriarch, and remain subject to him for life. Hence his power to persecute Asaad el Shidiak, who was one of them. They are clothed and fed, as well as taught, gratuitously. Their food is served in European style, and each has his own room. During their entire residence, they are never allowed to leave the premises, nor to converse with any from outside, nor even with each other, except during recreation. The families of the founders may also send two free scholars. The number of paying scholars is not limited. These, if Maronites, pay one thousand to twelve hundred piasters per annum, and furnish their own clothing and beds; if from another Papal sect they pay two thousand to twenty-four hundred piasters. Infidels and heretics are never admitted. The pupils have a professor and tutors, a confessor, a superintendent of deportment, and inspector of food. To be admitted, one must be able to read Arabic and Syriac; be over twelve years of age, and have a recommendation from his bishop. He is first received on trial, and if found unpromising is sent away. The time spent in the school is from five to eight years.

The studies are Syriac, Arabic grammar, logic, moral theology, and preaching; and in Ain Warkah, Latin, Italian, rhetoric, physics, and philosophy. Doctrinal theology was once taught; but as it led to discussion tending to Protestantism, it was given up. There are only two classes, and each has but one study at a time. The patriarch examines each school every year; he rewards each pupil according to his conduct and progress, to the amount of fifteen piasters or less, and the name of each, with his standing, is written down, attested by the seal of the patriarch, and affixed to the door of the college. The graduates, up to 1845, were one hundred and five, most of whom became celibate priests. They are teachers, judges, superiors of convents, or agents of the higher clergy. A few remain laymen. There are some among them of enlightened and liberal minds.

The diocesan colleges receive students only from their own diocese, and are subject to the bishops. They are: Mar Yohanna (St. John) Maron, in Jebeil, founded in 1832, with an income of thirteen thousand piasters, and twelve to eighteen scholars; Mismûsheh, near Jezzin, founded in 1833, under the auspices of the Emir Beshir, with an income of twenty thousand piasters, and the same number of students; and Kurnet Shehwan, in the Katia, founded in 1844, with an income of twenty-five thousand piasters, and a like number of students. The rules and studies are the same as in the general colleges. The schools for monks are at the convents of Bir Sumeih and Kefan, both together having sixty pupils, who are taught reading and writing in Syriac and Arabic, with casuistry; nothing more, not even arithmetic. The Maronites have the right to send six free pupils to the College of the Propaganda, at Rome.

They have one printing press at Kuzheiya. The monks do the work, and the profit goes to the convent. They print mostly in Syriac or Karshuny, and their issues are mainly prayer-books and others used in the churches; but their price puts them out of the reach of all except the rich, or churches and convents. Many books are also printed at Rome for the Maronites.

The *Greek Catholics* are converts from the Greek Church, and in 1845 numbered between thirty thousand and forty thousand. They retain the Oriental calendar, the communion in both kinds, leavened bread in the Eucharist, and the marriage of the clergy. In intelligence and enterprise they take the lead of other sects. Their patriarch is styled "Patriarch of Antioch, Jerusalem and Alexandria." He has no firman, and his income may amount to thirty thousand piasters. Maximus Mazlûm filled the office in 1845. They had then nine bishops; one the vicar of the patriarch, the rest diocesans of Akka, Tyre, Sidon. Beirût, Zahleh, Baalbek, Aleppo, and Diarbekir. Their income is from masses and other rites. The sect had only at that time fifty-five priests, mostly unmarried. In cities the monks discharged the duties of priests, which accounts for their small number.

Their fourteen convents and three nunneries were of two orders: Mukhallisiyeh and Shuweiriyeh. Their rules resemble those of the Maronites. Their income may amount in all to seven hundred and fifty thousand piasters. Besides these were ten Coenobia. The number of monks was two hundred and fifty, and of nuns ninety.

They had one press at the convent of Schweir, but small and nearly worn out. It printed only ecclesiastical books. Though they have few schools they are generally able to read, their children attending the schools of other sects. Their patriarch tried to found a college at Ainteraz, in the Jurd, but the building was burnt by the Druses in the war. The convent of Mukhallis having a library, receives scholars and promotes education; more before the Druse war, however, than after.

The *Armenian Catholics* are very few. They are converts from the Armenian church. Their patriarch resides at Bzummar, in the Kesrawan. They have two more convents in the same district; Beit Khashboh and El Kureim. They have three bishops and fifty monks.

The *Syrian Catholics* differ but little from the Maronites. In Lebanon they have two convents; one at Er Rughm, in the Metn, and the other at Sherfeh, in the Kesrawan. These people are found in Damascus, and north as far as Aleppo, but are very few.

The *Latins* are found chiefly in Jerusalem, Ramleh, Yaffa, and Nazareth, and number only a few hundreds, ministered to by the monks of the Latin convents in those places.

There are five European monastic orders in Syria: Capuchins, Carmelites, Lazarists, Franciscans, and Jesuits.

The *Capuchins* have four convents: one at Beirût, with seven or eight monks; one at Solima, with two or three; one at Ghuzir, now empty, and one at Abeih, with a single inmate. (One of the vivid recollections of the East, that remains with the writer, is that of going up to Abeih on the day of the battle, May 9, 1845, alone with the cawass of the American Consul; passing through a part of the Druse army, and reaching the village just in time to see Dr. Thomson carry his flag of truce to the beleaguered Maronites in the castle of the Emir Asaad. As soon as they were safe out of the place, under the care of the British Consul General, I found the partially burned body of a monk lying in the open street, and with great difficulty induced some of his own people to help me carry it to the convent and bury it under the earthen floor of the chapel.) They do not know the Arabic, and so do not preach; nor have any schools, except one at Abeih, with twenty children. They are proverbial for their hermit-like life, though they confess such as come to them.

The *Carmelites* have one convent on Mt. Carmel, well known to travelers as the most commodious hotel in Syria, and a most substantial structure. Its few inmates do little outside the convent.

The *Lazarists* have one convent at Aintura. Its three or four monks have a good boarding school, in which are usually thirty or forty scholars. The Shehab and Khazin families have the right to send two free scholars. Others pay from twelve hundred to twenty-four hundred piasters per annum for board and tuition. The studies are Italian, French, Turkish, Arabic grammar, and a little astronomy and mathematics. The inmates must attend worship with the monks, and receive religious instruction. They have two months' vacation in summer, and remain in the school as long as they please. The convent receives its support from France. Its inmates do nothing outside their school.

The *Franciscans* are the monks of the Terra Santa. They have two convents at Jerusalem, with sixty monks; one each at Bethlehem, Ain Kerim, Ramleh, Yaffa, Nazareth, Akka, Damascus, and Harisa in Lebanon, with near one hundred monks in all; in each, one acts as priest of a native congregation. The rest of the monks do not learn Arabic. Near Harisa they try to preach in the native churches, as missionaries of the Pope. In Palestine most of the convents have common schools connected with them. In Jerusalem they have

also a girls' school. The income of those who do not speak Arabic is from abroad.

The *Jesuits* had once convents at Solima, Bukfeiya, Aintura, and Zgharta, which passed into other hands till the order returned in 1836. Their number[1] is not over eight or nine; but they have abundant means, and large plans. At Beirût they expended one hundred thousand piasters, till the government ordered them to stop; and as they had no European protection they had to obey, though they retained their property, and kept on with their school, which has one hundred pupils, some of them Druses and Moslems. It is only a common day school, with some classes in Arabic grammar, Italian and French. They have three native teachers, and tuition is free. The Jesuits personally are the teachers of religion and morals. They themselves study Arabic. They have also bought a palace at Ghuzir, for one hundred and sixty-five thousand piasters, which they are fitting up for a boarding-school. Meantime, they have a common school with thirty scholars. In the Capuchin convent at Solima, they have another school of the same size; and a smaller one at Bukfeiya. At Zahleh they made an ineffectual effort to erect a building. Out of Beirût and Lebanon they have no foothold, and were it not for their helping him against the Protestants, the Maronite patriarch would not tolerate them. They are looked on as learned, prudent, self-denying, and suave; also as meddlers in politics as well as religion; but even Papists complain that their scholars do not learn much. They seem to have all the funds they want from the French Propagation Society at Lyons, France.

The Pope has always a legate in Syria, residing in his own convent at Aintura, who makes annual circuits among all the Papists, reporting to his superior whatever needs attention. He is expected to burn heretical books, and judge certain cases brought before him; but he has no claim on Syria for income, though he receives presents from the clergy of all ranks, and the leading men of the laity. The Pope allows him, beside, sixty thousand piasters. Any bishop may address the Pope, either directly or through his patriarch; but they may not visit Rome in person without first obtaining permission.

The reader will have noticed that in this account of Papal sects in Syria, nothing has been said of the Greek Church there. Instead of statistics of its clergy and convents, which may vary every year, the following account of a so-called religious ceremony, now happily confined to that church, is presented; for the character of a church may be learned from the spirit and style of such religious ceremonies as are peculiar to itself.

Judged by this standard, the spirituality of the Greek Church cannot be rated very high; for, after other churches in the East have renounced the imposition of the holy fire, as too glaring to be endured, that church still retains it as the chief attraction of holy week at Jerusalem. It takes place on the Saturday preceding Easter, in the Church of the Holy Sepulcher. In that immense

[1] 1845.

structure, the Greek Church is the most spacious and splendid of the many churches gathered within its walls; and when illuminated with its hundreds of gold and silver lamps, the light reflected from the gilded surfaces on all sides, makes an impression of surpassing splendor. The main scene of this performance, however, is in the large rotunda west of that, directly under the principal dome. Near the center stands the sepulcher, so-called, like a small chapel enclosed by the spacious edifice, and covered by its lofty roof. Outwardly it is twenty-six feet by eighteen, and is surmounted by a small cupola, though the inner apartment, said to represent the sepulcher, is only six and one-half feet long by six feet wide; and forty-three lamps, suspended from the low ceiling, light up its beautiful walls of verd-antique marble. From the outside of this to the circle of huge square pillars that support the dome, the marble floor is entirely clear. Galleries extend from pillar to pillar, tier above tier, as in a theater, for the accommodation of spectators who would be safe from the perils of the crowd below. Early in the day, or as soon as the doors are open, a dense mass of men, women, and children rush in and fill the area. As the day advances they overflow into the adjoining chapels, and every available niche and corner, gallery, balcony, and possible standing place is filled. It is to be expected that such a crowd will not be silent; but this is noisy in the extreme. Outside of heathendom, one can hardly find a so-called religious observance so noisy. Turkish soldiers are there with heavy whips, which they use without mercy, to keep open a narrow lane in the living mass round the sepulcher. Should they have occasion to escort any one through the crowd, their korbadjes[1] fall heavily on the heads of those in front, who sink down at once to allow them to pass over their bodies, and rise up again the moment they have passed. Meanwhile, the narrow lane is filled up by men running around the sepulcher, sometimes singly, sometimes in quaternions, bearing four men standing on their shoulders, shouting, yelling, singing, and waving handkerchiefs and head-dresses, in a frenzy of excitement. The women all this while keep up their shrill zughareet, or zulagheet, which once heard can never be forgotten, though others must hear it to know the piercing noise a crowd of Oriental women can make in their excitement. This grows louder when the runners overturn one of those animated human towers, or when some notable victory crowns the fierce quarreling on all sides; it culminates when, after some hours, the arrival of the governor announces that the event of the day is near. The Greek clergy then march round the tomb, holding aloft painted banners, swinging censers of burning incense, and chanting the appointed liturgy. Their loud voices, however, are drowned by the shouts of the men, the screams of the women, and the cries and blows of the soldiers who clear the way. When the bishop enters the sepulcher alone, the scene around it beggars description. Men cursing and swearing fight furiously to gain the place nearest the opening whence the fire is to issue; for he who gets it soonest, gets the greatest blessing. Large sums are sometimes paid for the first privilege, though how it is secured to the purchaser is hard to see. The soldiers sometimes have to separate the combatants. Now comes the climax of the frenzy. The moment the fire ap-

[1] Like our rawhides, only made of rhinoceros skin.

pears it were hard to tell whether each struggled hardest to secure it for himself or to hinder the success of his neighbor. They seem as eager to put out the tapers of others as to light their own; and no sooner do they secure the fire than they pass it over their faces, wash their hands in the flames, open their dresses and thrust the burning tapers into their bosoms, believing that it will not burn; and if beards are scorched, flesh is burned, or some feminine finery vanishes in a blaze, this is charged to the unbelief of the sufferer, while the faith of the mass remains unshaken. Some years more serious results follow the fanatical performance. In 1834 Dr. Thomson saw several hundred pilgrims crushed to death in their frantic efforts to escape from the suffocating fumes of an unusual number of tapers. Even the celebrated Ibrahim Pasha of Egypt, who was present, was with difficulty rescued by his guard. And it is no unfrequent occurrence that a number are trampled to death in the resistless surgings of an excited crowd pent up in so confined a space. Yet the Greek clergy still keep up the imposition, and the crowds still carry their burial robes to be imbued with saving virtue by contact with this holy fire, and carry home the extinguished tapers as possessing similar power. It is distressing to see such scenes enacted in the place where some would have us believe that our Redeemer arose from the dead; and though we may satisfy ourselves that the real scene of the Resurrection is not thus desecrated, that does not diminish the dishonor done to Christ in the presence of scoffing Moslems, who are thus taught by so-called Christians to "blaspheme that worthy name by the which [they] are called."— James ii : 7. It is some comfort, however, that the increased spread of the light, through the labors of missionaries, is compelling even this work of darkness to hide itself for very shame. The annual crowd grows smaller, though when the writer saw it, twelve years after Dr. Thomson, the crowd was not diminished. But we hope that at no distant day it may disappear from among the Easter observances of the holy city.[1]

YEZIDEES.

Much less is known about the Yezidees than has been learned about the Druses. Personal investigation has not been so thorough or so long continued; and the fate of war has not given their sacred books into the hands of scholars, as it did those of their Lebanon contemporaries. Though they are an illiterate people, yet there is little doubt that they possess sacred books; but Mr. Layard, much as he had done for them, and cordially as they were attached to him, never could succeed in getting a sight of them.[2]

Name. There have been various opinions about the origin of the name Yezidee. Moslems trace it to the Ommiade Caliph Yezd, the persecutor of Ali. Some would derive it from the city Yezd. Cawal Yusuf told Mr. Layard that their ancient name for God was Azed, and that this was the origin of their name.[3] Those living in Sheikhan also call themselves Daseni; from Dasen, the ancient name of that district.[4]

[1] *The Land and the Book* — volume on Southern Palestine and Jerusalem — pp. 478–481.
[2] *Babylon and Nineveh*, p. 92. [3] Do., p. 94. [4] *Lost Tribes*, p. 47.

Territory. They occupy various regions in the vicinity of Mosul. Two large villages, Baasheka and Baazani, lie about four hours distant to the north-east, at the foot of Jebel Maklûb, and their villages extend thence along the western base of the mountains, almost to Jezirah. This region is called Sheikhan. Their religious center is Sheikh Adi, a valley in the outlying hills to the south of the Gara range. Its irregular surface, shaded by leafy groves, and irrigated by clear streams of water, forms a delightful contrast to the bare dreariness of the plains below, and is just such a place as the denizens of old Nineveh, as well as the citizens of Mosul, its modern representative, would choose for a summer retreat. Their political center is Baadri, a village about five miles north of Ain Sifni, and to the south of the hill below Sheikh Adi. Besides this region, they also occupy Jebel Sinjar, a mountain range fifty miles long by eight in breadth, that rises out of the Mesopotamian plain. Its eastern point is eighty-three miles west of Mosul, and its western seventy miles south of Nisibin. The districts of Kherzan and Redwan, occupying the angle enclosed by the Tigris and the Sert rivers, are also peopled by Yezidees. Some of them are found, also, in the pashalic of Aleppo, in northern Armenia, and in Georgia.[1]

Population. Concerning this there is no definite information. Dr. Grant said we must reckon them by tens of thousands,[2] and Dr. Lobdell makes their number a hundred thousand;[3] but we must wait for more accurate statistics. If different writers make different estimates, we must remember that in the merciless persecutions of the past they were subject to wholesale massacre. In 1833 Kûr Bey of Ravan-dooz, having driven the population of Sheikhan for refuge to Mosul, the poor fugitives found the river Tigris in flood, and the bridge of boats taken away; so they fled to the level top of the mound of Koyunjik, and there their pursuers finally overtook and slaughtered the whole of them — men, women and children — in plain sight of the citizens of Mosul, across the river. Ten thousand are said to have perished at the hands of the bloody Bey of Ravan-dooz; and after this, Mehemet Reshid Pasha subdued Sinjar, destroying three fourths of the population, and Hafiz Pasha,[4] after a second slaughter, carried off more than thirty thousand into slavery, till even as far off as Samsoon, on the Black Sea, Yezidee girls were sold for thirty piasters.[5] Then Mohammed Pasha robbed them by his merciless exactions, and killed such as dared to murmur or expostulate.[6]

The Yezidees have suffered persecution from the Moslems for centuries. The harems of southern Turkey have been filled with them, after the men, and such women as they did not care to carry away, were slaughtered. An annual Yezidee hunt was one of the sources of the revenue of Badir Khan Bey, and the pashas of Mosul and Bagdad hushed the clamors of their spahis for arrears of pay, by letting them loose on the Yezidees.

There may have been some original provocation for all this, but however

[1] *Dr. Grant and the Mountain Nesterians*, p. 121; *Memoir of Dr. Lobdell*, pp. 215-226; Layard's *Babylon and Nineveh*, p. 47; *Nineveh and its Remains*, Vol. I, pp. 229, 230, 232: Fraser's *Mesopotamia and Assyria*, pp. 147, 148, 285-289.

[2] *Lost Tribes*, p. 48. [3] *Memoir*, p. 214. [4] *Nineveh and its Remains*, Vol. I, pp. 229-230.

[5] A piaster is worth four cents. [6] *Bibliotheca Sacra*, 1848, p. 165.

that may be, it is not strange that such treatment roused a fierce revenge, which improved every opportunity for retaliation. One of the kotcheks at Sheikh Adi gloated over the memories of such retaliations, as he recounted them to the writer in 1844.[1] Since the terrible inflictions of Mehemet Reshid and Hafiz Pashas, they have resigned themselves to their fate with a passive despair, and yet with a steadfast devotion. They invariably prefer death to apostasy from their religion. Even children brought up in Turkish harems, secretly adhere to their sect and their cawals (priests).[2]

Origin. Dr. Grant was led by his theory of the origin of the Nestorians, to claim that these also were descended from the ten tribes of Israel; but a Scotch jury, after hearing his arguments, would bring in the verdict "not proven." Others see in them a remnant of the ancient Chaldeans. But we need resort to neither of these theories. Their language, Kermanj, or Kûrdish, would indicate that they are the descendants of the ancient inhabitants of the districts they now occupy. Layard tells us[3] that they have a tradition that they came originally from Busrah and the lower Euphrates; settled first in Syria, and afterwards in the Sinjar and farther east. The particular race represented by them cannot be certainly known till their dialect of the Kûrdish has been more thoroughly studied, and its affinities ascertained, or their tribal traditions more accurately understood. Hussein Bey traces his ancestry back to the Sassanian dynasty.[4]

Personal Appearance. The families of the cawals intermarry, and are remarkable for the beauty of both sexes. Their complexion is dark, but their features regular. Their dress is as tasteful as the material will admit of. At their feasts the women weave flowers into their hair, or bind a wreath of myrtle round their black turbans. They wear amber, coral, agate, or glass beads round their necks. The black skull caps of some are covered with imbricated strings of coins. A yellowish check plaid, tied over one shoulder and falling in front over the ziboon,[5] is a peculiarity of their costume. The sketch given on the next page, the same as in *Dr. Grant and the Mountain Nestorians*, p. 120, is from a sketch by Claudius James Rich. The married cover the neck with a white kerchief. Others leave it bare. Bright colors are worn by the girls. Older women are content with plain white.[6] The more wealthy among the men wear gay jackets and turbans, with rich arms in their girdles.

The women of Sinjar have a sallow complexion and irregular features. The girls wear white underclothing and colored silk ziboons, open in front and confined at the waist with a girdle ornamented with pieces of silver. The men have dark complexions, black, piercing eyes, and often forbidding features. They are short, but well proportioned; muscular, and capable of great fatigue. Their dress consists of a shirt,[7] loose trowsers,[8] and cloak[9] — all white — with a black turban, below which their hair falls in ringlets. Their long rifles, and

[1] *Bibliotheca Sacra*, 1848, p. 164.
[2] *Nineveh and its Remains*, Vol. I, p. 231.
[3] Do., Vol. I, p. 252; *Babylon and Nineveh*, p. 254.
[4] *Life of Lobdell*, p. 215.
[5] Dress.
[6] *Babylon and Nineveh*, pp. 87–88.
[7] Camees.
[8] Shalwar.
[9] Abba.

swords, the pistols in their girdles, and the reed cartouch cases on their breasts, make them look as ferocious as their reputation.[1]

There is a curious discrepancy in the accounts of the dress of the Yezidees, as given by Mr. Layard and our missionaries. He says:[2] "They are forbidden to wear the common Eastern shirt, open in front, and theirs is always *closed up to the neck*." Dr. Lobdell speaks of the peculiar shape of their garments—all *crescent-shaped at the neck*;[3] while the writer[4] says: "Their dress resembles

YEZIDEES.

that of the Kûrds, with the exception that while the garment of the latter is fastened close round the neck, that of the Yezidees is open for some distance down the breast, the two sides not meeting till they overlap near the girdle. The popular explanation is that Satan wears an iron collar with a projection in front, and they leave that space open in his honor." This agrees with Dr. Lobdell, but not with Mr. Layard; and yet, while I saw them only occasionally

[1] *Babylon and Nineveh*, p. 254.
[2] Do., p. 254.
[3] *Memoir*, p. 215.
[4] *Bibliotheca Sacra*, 1848, p. 160.

during a short time, he mingled with them intimately and repeatedly during a number of years; so that his testimony ought to be the correct one.

The dwellings of the Yezidees, unlike most in the East, are scrupulously clean and neat.[1] Before appearing at Sheikh Adi they wash their persons and clothes in the streams; and Layard[2] says he never saw such assembled cleanliness in the East. Their clothes, mostly white, were spotless.

Their year is the same as that of the Christians. They have no real Sabbath; but the women do not wash on Wednesdays,[3] though other work goes on. Some always fast on that day.[4] They have an era of their own, of which the year 1550 corresponded to our A. D. 1846, suggesting some connection with Manes.[5] Some of them fast three days at the beginning of the year, but they do not keep Ramazan.

There are no religious observances connected with their marriages, nor is the number of wives limited; and polygamy is common, though only one wife is strictly lawful. The couple merely appear before a sheikh, who ratifies their mutual consent to the union. A ring, or some money, is then given to the bride, and a day is fixed for the feast, when they drink and dance. Fathers had been in the habit of asking large sums for their daughters; but in 1849 Mr. Layard, with Mr. Rassam, induced them to diminish their demands.[6] He describes the marriage of the daughter of a cawal as follows:[7] On the first day the parties entered into the contract before witnesses. On the second, the bride was led to her new home, with music, in the midst of a festive throng. A thick veil covered her from head to foot, and she was kept behind a curtain in the corner of a dark room for three days, after which the bridegroom was allowed to see her. All day long, and through most of the night, the tahlehl of the women and the music were kept up. On the third day the bridegroom was led from house to house, receiving at each a small present. Then a circle of dancers wet small coins and stuck them on his forehead till they fell off into a kerchief held before him. Some of the richer guests were also carried off by a party of young men and locked up till they ransomed themselves; and amid the feasting, and raki drinking that followed, Mr. Layard left the village.

Concubines are not forbidden. In case of adultery, the wife may be divorced, and the husband marry again, with the consent of the sheikhs; but the divorced wife cannot marry again. Formerly, the wife guilty of adultery was put to death.[8]

At their funerals the body is washed in running water, and buried with the face toward the north. If a cawal is not present, the first one who comes prays over the grave. The widow dresses in white, and throwing dust over her head, accompanied by her female friends, meets the mourning procession, dancing, and holding the sword or shield of her husband in one hand, with locks cut from her own hair in the other.[9]

They have not a good reputation in the matter of temperance;[10] but they will

[1] *Memoir of Lobdell*, p. 215.
[2] *Nineveh and its Remains*, Vol. I, p. 237.
[3] Lobdell, p. 218.
[4] *Nineveh and its Remains*, Vol. I, p. 249.
[5] 275 A. D.
[6] *Babylon and Nineveh*, p. 84.
[7] Do., p. 205, 206.
[8] Do., p. 93.
[9] Do., p. 94.
[10] *Bibliotheca Sacra*, 1848, p. 161; *Nineveh and its Remains*, Vol. I. p. 249.

not eat lettuce or okra — called there *bamiyah* — or pork. In slaughtering animals for food they observe the Mosaic and Moslem rules, respecting the blood. Blue is to them an abomination, as it was to the Sabeans; making the conscription which began in 1847 very offensive to them, as the Turkish uniform is of that color. Through the efforts of Sir Stratford Canning, afterwards Lord Redcliffe, they were relieved from this; and Mr. Layard carried the welcome news to them, along with one of their cawals, who had been sent to Constantinople to petition for its abolition. Their keblah is the north star, toward which they turn the faces of their dead;[1] though the east is called this by Mr. Layard in his former work.[2] There was a like uncertainty about that of the Sabeans; some making it the east, and others the north star.

The Yezidees show great reverence for fire. They pass their hands through a flame, rub them over their right eyebrow, or even the whole face, and then kiss them. They also kiss the object which the rays of the sun strike first in the morning.[3] One of the sacred buildings at Sheikh Adi is dedicated to Sheikh Shems (the sun).[4] Mr. Layard saw a drove of white oxen driven into a pen attached to this building, that were dedicated to the sun, and never slain except at feasts, when their flesh was given to the poor. The classical scholar will recognize in this a resemblance to other ancient religious systems. Sheep also are offered here, and likewise at other noted tombs, the flesh being cooked and distributed among the visitors, or given to the poor.[5]

At Sheikh Adi numerous lamps are lighted at night.[6] A kotchek told the writer one hundred and eighty-three one night, and the same number of different ones the next, making three hundred and sixty-six every two nights; or, one for every day in the year; each in honor of some Yezidee saint — some of them mere oiled wicks, and others more elaborate arrangements. They are lighted from the lamps kept burning constantly in the temple of Sheikh Adi. It took nearly an hour to light them all, scattered as they were up and down the valley; and a woman on some nights — not on all — followed the lamplighter, burning incense before each. Every morning they go round and kiss the black, greasy spots left on the stones. They also kiss the sides and threshold of the temple.

This temple is only a larger and better specimen of the houses of Sheikh Adi, seen in every Yezidee village. These consist of cubical structures of stone, surmounted by a fluted cone, instead of a dome. The whole is covered with plaster, and appears very white in the sunlight. There are a great number and variety of buildings at Sheikh Adi. Besides the temples are houses for the entertainment of distinguished guests, such as Sheikh Nasr and Hussein Bey; and inferior ones for others. Every village has its own, occupied by its people when they go up to the annual feasts. Then there are arched passages, like the monkish cloisters, built over every path that leads to the sacred place; and ruder shelters scattered throughout the valley. The principal temple is divided by pillars and arches into three apartments or aisles, in one of which is the large reservoir in which children are baptized naked, by immersion, and for

[1] *Babylon and Nineveh*, p. 94.
[2] *Nineveh and its Remains*, Vol. 1, p. 248.
[3] *Lost Tribes*, p. 45.
[4] *Bibliotheca Sacra*, 1848, p. 158.
[5] *Lost Tribes*, p. 363; *Life of Lobdell*, p. 22: ; *Babylon and Nineveh*, p. 255.
[6] *Bibliotheca Sacra*, 1848, p. 165.

a consideration in money, though adults receive the same ordinance by affusion; and the cawals carry with them a bottle of the sacred water from Sheikh Adi, wherewith to baptize infants too distant to be carried there. The water is very clear, and, as the deposits of lime in various places show, is impregnated with that mineral. On the north side of this is a mustubah,[1] called the seat of Sheikh Adi. In another apartment is his tomb. There are no ornaments inside the temple, and only a few symbols rudely carved on the stones of the wall outside; such as birds, serpents, combs, and crosiers. One or two Arabic inscriptions are also built into it. These premises are held so sacred that no one is allowed to enter the temple court without taking off his shoes.

They have four orders of priests: pirs, sheikhs, cawals, and fakirs. The offices are hereditary, and descend to women as well as to men. Indeed, women seem to be much respected among them. Yet Dr. Lobdell[2] says that their ignorance is very great. One of his female patients told him that the women never pray; that she did not know that there was any life beyond this; nor did she know who Christ was, or what he proposed to do.

A pir, or saint, is reverenced next to their great sheikh. They are believed to have power to cure disease and insanity. A sheikh is next in rank. They have charge of the sacred premises, keep up the holy fire, and entertain pilgrims. They also sell the little balls of clay made from the dust of the temple, which are believed to possess great healing power. They are not sectarian in this superstition, for Hussein Bey, in the presence of Dr. Lobdell, begged some of the sacred dust that lay thick on the tombs of the Chaldean patriarchs, in the convent of Rabban Hormuz, for the same purpose of healing.[3]

The cawals, who are preachers, visit their different communities, like Methodist circuit riders. They are skillful performers on their sacred instruments — the flute and tambourine; and wherever they go they collect the sacred offerings for Sheikh Adi. These are divided into two equal parts; one for the maintenance of the sanctuary, and the other is given — half to Hussein Bey, and half to the cawals. While the dress of the sheikhs is white — all save the skull-cap inside the turban — these wear black turbans with their white garments.

The fakirs, called also rahban (monks),[4] are the lowest order of the priesthood; do all the drudgery at Sheikh Adi, and wear a coarse dark dress, with a red kerchief tied across their dark turbans.[5] Those among these four orders devoted to the care of the sacred buildings at Sheikh Adi are called kotcheks.[6] Hussein Bey is both their civil and religious head;[7] though Mr. Layard[8] makes him the political, and Sheikh Nasr the religious, head; and so does Dr. Lobdell.[9] But as in 1846 he was quite young, he delegated his religious duties to Sheikh Nasr, chief of the sheikhs of Sheikhan, and made Sheikh Jindi the peesh namaz, or leader, in the performance of their ritual. Mr. Layard describes Hussein Bey as handsome; his features regular, his eye lustrous, and the long curls hanging from under his turban of the deepest black. A white cloak of fine texture covered his rich dress.[10] The Yezidees pretend that it is

[1] Raised seat.
[2] *Life of Lobdell*, p. 225.
[3] Do., p. 215.
[4] *Bibliotheca Sacra*, 1848, p. 160.
[5] *Nineveh and its Remains*, Vol. I, p. 251.
[6] *Bibliotheca Sacra*, 1848, p. 160, 161; *Babylon and Nineveh*, p. 85.
[7] *Babylon and Nineveh*, p. 93.
[8] *Nineveh and its Remains*, Vol. I, p. 227.
[9] *Life*, p. 215 and 220.
[10] *Nineveh and its Remains*, Vol. I, p. 227

unlawful for them to learn to read; but as they are not noted for veracity, this may be only an excuse for their general ignorance. Mr. Layard says there are only one or two among them who can read and write; and even Sheikh Nasr does not know the alphabet. He took an Arabic book from the writer, and contemplated its pages very solemnly upside down.[1]

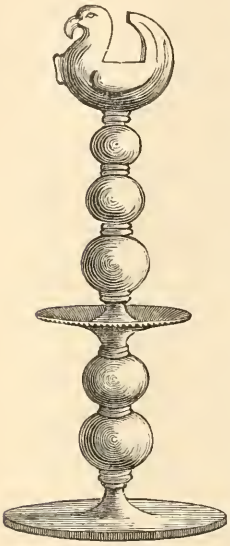
In some things they resemble the Druses, with whom they claim connection.[2] Like them they refuse to receive others into their sect; as the Druses say, "the door is shut." They practice circumcision like them, and yet the Yezidees perform it at a much earlier period than the Moslems, and in a different style, as Dr. Grant explained one day to the writer. They also conform in many things to the Moslems, whom, like the Druses, they both fear and hate. They are also more favorably disposed toward Christians, as Dr. Grant learned the first time he went among them.[3] They do not pray, even to Satan;[4] and Mr. Layard says[5] that, as far as he could learn, they neither offered direct prayer or sacrifice to God. Sheikh Nasr "evaded questions on this subject, and shunned with superstitious awe every topic connected with the thought of God;" and we have seen how the Druses put veracity in place of prayer, and neither pray to God, nor speak the truth to men not Druses. It is hardly necessary to point out the similarity of the two sects in carefully concealing all knowledge of their peculiar tenets.

Sheikh Adi himself seems to correspond very much with the Druse Hamzé, one of the divine manifestations, which they call the five ministers of God. One of these is called "The Preceder," and Sheikh Adi says: "I am the ruling power preceding all that exists." Both Hamzé and Sheikh Adi claim to be the Creator. The latter says: "I am he who spread over the heavens their height;" and again: "Everything created is under me;" and again: "I create and make rich those whom I will;" and yet he claims to exist apart from God, saying: "I am he to whom the Lord of heaven hath said, 'Thou art the just judge, and the ruler of the earth;'" and even to be a man, saying: "I am Adi of Syria (or Damascus), the son of Moosafir."[6] And we know that Hamzé was associated with the caliph El Hakem, and claimed to have been incarnate repeatedly before that.

The religion of the Yezidees is agreed to have Sabeanism or Zoroastrianism for its basis.[7] Mr. Layard says:[8] "They have more in common with the Sabeans than with any other sect." And again:[9] "There is in them a strange mixture of Sabeanism, Christianity, and Mohammedanism, with a tincture of the doctrines of the Gnostics and Manicheans. Sabeanism, however, seems to be the prevailing feature." From Christianity they appear to borrow the conception of Sheikh Adi as creator of all; and yet a human being, one to whom God speaks, and on whom he confers dignities. So from Islam they learn to speak of the Mehdi,[10] and other things peculiar to Mohammedanism. They believe that Christ will come to govern the world, and after him Sheikh Mehdi

[1] *Nineveh and its Remains*, p. 252; *Bibliotheca Sacra*, 1848, pp. 161, 163, 170; *Life of Lobdell*, p. 222.
[2] *Bibliotheca Sacra*, 1848, p. 169; *Life of Lobdell*, p. 224.
[3] *Lost Tribes*, p. 44.
[4] *Life of Lobdell*, p. 224.
[5] *Nineveh and its Remains*, Vol. I, p. 245.
[6] *Babylon and Nineveh*, pp. 90–91.
[7] *Life of Lobdell*, p. 224; *Bibliotheca Sacra*, 1848, p. 169.
[8] *Nineveh and its Remains*, Vol. I, p. 248.
[9] Do., p. 252.
[10] Guide.

will appear and have special charge of those that speak Kûrdish. According to them, the general resurrection will take place in the vast plain of Bozan, near Baadri.[1] Query: Is this resurrection like that of the Druses, described on page 294; or, like that spoken of in the Word of God? They profess to hold intercourse with the spirits of another world, like our Spiritualists.[2] They believe that all must pass through an expiatory hell into heaven, but that none will suffer eternally.[3] Hence their care to avoid giving offence to Satan, who, they believe, will be restored to favor, and so be able to reward his friends.[4] God, they say, is so good he need not be propitiated; but it is needful to keep on good terms with the evil spirit. They speak of him as Melek Taoos,[5] and the cawals carry round with them brazen images of a bird on a sort of Oriental candlestick, as vouchers for their mission, and a means of blessing to their followers. There is here given an engraving of it, from Layard's *Babylon and Nineveh*, p. 48. One of them gave Dr. Lobdell the following account of the origin of this name: In the absence of his disciples, Satan, in the form of a dervish, took Christ down from the Cross and carried him to heaven. Soon after the Marys came and asked the dervish where Christ was. They would not believe his reply, but promised to do so if he would restore the chicken he was eating to life. He did so; and when he told them who he was they adored him. When he left them he promised always to appear to them as a beautiful bird, and so the peacock became his symbol.[6]



They say that Melek Taoos so loved Christ that on one occasion he snatched an arrow from a Jew, with which he was about to kill him; and just before he was nailed to the Cross he conveyed him away and substituted another in his place, who was put to death.[7]

They cannot endure that any should pronounce a word even remotely resembling the name of Śatan. Hence Shat, the Arabic name of the Tigris, and naal,[8] from its resemblance to laan,[9] both come under the ban.[10] Mr. Layard once came very near causing a great commotion through inadvertently forgetting this; and, though he recollected himself before he got the word half uttered, and stopped, it was some time before the Yezidees recovered their composure.[11] Indeed, he tells us that they are said to have put to death some who had outraged their feelings in this way.[12]

Mr. Layard describes a part of their worship, which he was allowed to attend; for there were parts of it at which he could not be permitted to be present. He speaks of thousands of lights in the darkness, glimmering among the trees, dancing in the distance, and reflected from the streams and tanks — for he estimated that seven thousand persons were present. Suddenly the hum of

[1] *Life of Lobdell*, p. 217. [2] Do., p. 217. [3] *Babylon and Nineveh*, p. 93.
[4] *Lost Tribes*, p. 46; *Bibliotheca Sacra*, 1848, p. 169. [5] King Peacock.
[6] *Memoir*, p. 223. [7] *Bibliotheca Sacra*, 1848, p. 169. [8] A horse shoe. [9] A curse.
[10] *Bibliotheca Sacra*, 1848, p. 169. [11] *Nineveh and its Remains*, Vol. I, p. 238. [12] Do., p. 245.

voices was hushed, and a strain, solemn and sad, rose from the valley; music so sweet and pathetic he had never heard in the East. It reminded him of the cathedral chants of old England — voices of men and women, blended with the soft notes of flutes, broken at intervals by the loud clash of cymbals and tambourines. He hastened to the sanctuary, and found it lighted up with torches and lamps, throwing a soft light on the white walls and green foliage. The sheikhs were ranged on one side, and thirty cawals were seated opposite, each performing on tambourine or flute. The fakirs stood around in their dark dresses, and the women priests in pure white. No others were allowed in the court. The music lasted for an hour. He could not catch the words. As the time quickened, the tambourines broke in more frequently; the sad music gave place to a lively melody, and this was finally lost in a confusion of sounds. The tambourines beat furiously, the voices were raised to the highest pitch; the men outside took up the sounds, and the women raised their shrill tahlehl, till the performers threw their instruments into the air; and he never heard a yell so frightful as that which followed. Then the noise gradually died away, and the crowd dispersed.[1]

Another writer describes it thus: "It is at night that they adore the being without name, with songs and dances, to the accompaniment of the tambourine. The peacock of the angels has his seat in the midst; and when he is perfectly satisfied with the honors paid him, announces it by a yell that reverberates through the mountains, and the tambourines vibrate without the touch of mortal hand."[2] This is of course overdrawn.

The writer heard it once, though not allowed to see it, and thus described it:[3] "After midnight we heard a loud lamentation, as though from one in extreme terror, broken by bursts of weeping. It gradually came nearer, till it entered the temple. It resembled nothing so much as the remonstrances of a Hindoo widow, forced to ascend the funeral pile; now and then varied by a burst of uncontrollable despair."

It is pleasant to note that nothing indecorous or immodest takes place in this midnight worship. Neither Dr. Azariah Smith nor the writer, in 1844, Mr. Layard, in 1846 and 1848, nor Dr. Lobdell, in 1852, saw the slightest approach to anything of the kind.

The Yezidees may have been merciless in the days of their power; but what people can point to a faultless past? They may be very untruthful now; but on that point what Oriental people are without blame? Everything that we know concerning them leads us to wish to understand them better, and to see what a beautiful character would blossom out of these worshipers of Satan, when brought under the quickening power of the Gospel of Jesus Christ.

[1] *Nineveh and its Remains*, Vol. I, pp. 241–242. [2] Kelly's *Syria and the Holy Land*, p. 50.
[3] *Bibliotheca Sacra*, 1848, p. 170.

XVI.

CONTRIBUTIONS TO HISTORY.

Missionaries have more to do with making history than with writing it. Still that does not hinder others from preparing a modest record of their labors. Neither the brilliant rhetoric of a Macaulay, nor the vivid portraiture of a Prescott, have yet been employed in setting forth their work; but that work itself does not shrink from comparison with any deeds that have called forth the exercise of the highest genius.

Dr. Joseph Tracy prepared a history of the American Board down to the year 1841, in the form of annals, which bears the marks of his characteristic accuracy. This work reached a second edition. After the stream of history had advanced more than a score of years beyond the point where he left off, historical sketches of the various missions, in the form of octavo pamphlets, began to be issued by the Board, as an aid to pastors in their preparation for the monthly concert. One, of the Ceylon mission, by Rev. W. W. Howland, and of the Madura and Madras missions, by Rev. J. Herrick — forty-eight pages in all — bears the date of 1865. Others of the Marathi (thirty-two pages), by L. Bissell, D.D.; Turkish (forty-eight pages), by G. W. Wood, D.D.; Syrian (thirty-two pages), by T. Laurie; and Nestorian and Assyrian missions, (thirty-two pages), by J. Perkins, D.D., and T. Laurie, were issued in or previous to 1866. The missions of the Board in the Pacific were described by Dr. S. C. Bartlett (thirty-two pages), in 1869; and a pamphlet describing our missions in Africa (thirty-two pages), by Rev. W. Ireland, appeared without date. They may seem small things to mention, yet one of them has been referred to as authority in a recent history of the Christian Church, by Philip Schaff, D.D.[1] The same work refers twice to Smith and Dwight's *Researches in Armenia*,[2] once to Dr. Perkins' *Residence of Eight Years in Persia;*[3] to Dr. Dwight's *Christianity Reviewed in the East;*[4] and to the *Memoir of Rev. D. T. Stoddard.*[5]

In the year 1861 Dr. Anderson, the then senior Secretary of the Board, published a memorial volume of its first fifty years, giving an account of its origin and early history; its constitution and relations to ecclesiastical bodies;

[1] Vol. II, p. 733.
[2] Do., pp. 730 and 782.
[3] Do., p. 730.
[4] Do., p. 782.
[5] Do, p. 733.

its founders, meetings, committee, correspondence, library, and cabinet; its finances, agencies, relations to governments, and deceased secretaries. Then its missions were described in their constitution and origin; their development and laws of growth; the missionaries themselves; their churches, schools; their preaching, and printing; their intercourse with the Board; their literary labors — and the whole was brought down to the close of the half century. This was followed by a volume in 1864, giving an account of the Hawaiian Islands, and their advance under missionary labors. The year 1872 saw two more volumes from his pen, devoted to our missions in Western Asia; and 1874 brought two additional volumes: one on the Sandwich Islands, and the other on India; when he who had done such good service and so long, rested from his labors, waiting for the summons that so recently called him home — not to cease from service, but to render it still, in ways so much better that to know them we must wait till we also follow after.

In the year 1878 a smaller set of historical sketches were issued in 12mo pamphlet form, prepared by Rev. Dr. S. C. Bartlett — one on our missions in Africa, of thirteen pages, from the same pen, having appeared in 1871. They were: On our missions in Turkey, thirty-four pages; those in India, twenty-nine pages; in China, twenty-four pages; among the North American Indians, forty-seven pages; in the Sandwich Islands and Micronesia, thirty-four pages. Dr. I. R. Worcester, for many years editor of the *Missionary Herald*, wrote one on our missions in Japan, twenty-four pages, and another on the same in Papal lands, twenty-eight pages; both published in 1879. Various missionaries have written histories of the countries where they have labored. Among these, Rev. S. Dibble and Rev. H. Bingham have written of the Hawaiian Islands, including not only the progress of the people under the influence of the Gospel, but all that was known of their history previous to the arrival of missionaries among them, and giving an account of the native traditions that go back to the ages preceding their discovery by Capt. Cook.

Rev. Drs. E. Smith and H. G. O. Dwight preface the account of their travels in Armenia with a sketch of its ancient history,[1] going back to the traditional origin of the nation, from Haik, the grandson of Japhet, and bringing it down to the present time, through all the varied and intensely interesting fortunes of that nation. One hardly recognizes the familiar names of history in their Armenian dress. Tigranes indeed cannot be concealed under Dikran; but one hardly suspects Ajtahag to be the same as Astyages; or thinks of Arsaces in connection with Arshag; or of Mithridates, when reading of Mihrtad; or of finding Barzaphanes in Pazapran, Artaxerxes in Ardeshir, or Tiridates in Durtad; though Pacorus can be recognized in Pagoor. Passing by the persecutions of the Persian fire worshipers, the Seljookians, Tamerlane, and others who drenched the land in blood, it is distressing to read of Shah Abbas the Great drawing through the land a broad intrenchment of desert, as the best defence of his western frontier, and driving off, like so many cattle, the entire population to Persia — families separated, multitudes drowned in crossing the rivers, and destroyed in many other ways before reaching their place of exile. Five

[1] Vol. I, pp. 13-41.

hundred thousand Georgians and Armenians were thus torn from their homes, and deported into Persia.[1]

Dr. Allen devotes two hundred and eighty pages of his large work on India to the history of that country. He begins in the mythical antiquity of their own yugas. These are said to have been from eight hundred and sixty-four thousand to one million seven hundred and twenty-eight thousand years in length, and it takes four billion three hundred and twenty million years to make a kalpa, or day of Brahm.[2] He then describes the original inhabitants, now existing only in widely separated fragments of the present population; as, Bheels in Central India, Coolees in Gujerat, Goands[3] in Orissa, and Shanars, and others in the South.[4]

The Hindoos are next described as an invading race from the northwest, as was done by Mr. Hoisington. The distinctions of caste, the Vedas, the institutes of Menu, the Puranas, the Ramayana, and Mahâbhârat, all pass under review.[5] Then the invasion of Darius, nearly twenty-four hundred years ago — about 500 B. C.—followed two centuries later, by that of Alexander the Great, when Porus and Sandracottus[6] reigned and fought, and Palibothra was a noted city in the land.[7]

The Mohammedan period next passes before us, from Mohammed Kasim, sent with six thousand men by the Caliph Waleed, who, landing at Dewal, sacked a number of cities in Scinde, but was at length driven from the country, down through the more permanent invasion of Subuctajee, to the reign of his son Mahmoud,[8] who captured the great temple of Somnat. The house of Ghori, who reigned A. D. 1160–1206; Cuttub ed Deen and his successors, A. D. 1206–1288, including Altumsh, Bulbun, and Kei Kobad, and the house of Khiljee, A. D. 1288–1421, follow in succession.[9] During this last period, the house of Toghluck, A. D. 1321–1412, reigned, and Tamerlane devastated the region.[10] Baber, A. D. 1526, Humayoon five years later, and Acber, A. D. 1556, carried the Mogul empire up to the zenith of its glory. Acber's camp equipage consisted of tents and portable houses framed of the most costly materials, in an enclosure of high canvas walls, fifteen hundred and thirty yards square. This contained large halls for public receptions and banquets, galleries for exercise, and chambers for retirement. All was fitted up for the most luxurious enjoyment, and seemed like a castle in the camp, which stretched away on all sides in regular streets, and covered a square space five miles across — an immense city of tents.

On festivals, the Emperor's usual place was on his throne, in a royal pavilion, in the center of two acres spread with silk carpets interwoven with gold, and adorned with hangings as rich as velvet, embroidered with gold, pearls, and precious stones could make them. The nobility interchanged visits in pavilions only less costly. Their turbans sparkled with diamonds, and were adorned with waving heron plumes; and they received royal gifts of dresses and jewels, horses and elephants. Acber himself was weighed in golden scales against gold, silver, perfumes, and other precious things, which were then scat-

[1] Do., pp. 39, 40. [2] Dr. D. O. Allen's *India, Ancient and Modern*, pp. 19–20. [3] Khonds.
[4] Dr. D. O. Allen's *India, Ancient and Modern*, p. 22. [5] Do., pp. 23–26. [6] Chandragupta.
[7] Dr. Allen's *India*, pp. 27–32. [8] Do., pp. 38–56. [9] Do., pp. 56–83. [10] Do., pp. 83–94.

tered among the spectators, while his own hand showered gold and silver fruit among his courtiers. Hundreds of elephants passed before him in review, the leading ones wearing gold plates glittering with precious stones on head and breast.

Acber, though a deist, delighted in discussions concerning religion and philosophy, and invited the Papal priests of Goa to teach him their religion; but when they saw the homage he paid to the sun, and himself accepted from the people, feeling that they made no impression, they left him and returned.

After a reign of fifty-one years, he was succeeded by his son, Selim, A. D. 1605, who assumed the title of Jehangeer,[1] and made the famous Noor Mahal[2] his empress.[3]

Khurrum, his son, after various fortunes succeeded to the throne, and at once put to death his brothers and their families, leaving no descendant of Tamerlane except himself and his own children. He seemed to prosper for a while; erected splendid palaces and mosques in his principal cities, and was so fond of pomp and show that he spent $7,500,000 on a single festival. Among other ways of getting rid of so much money on such occasions, he had vessels full of gold coin and jewels poured over him and then distributed among the guests. Such extravagance did not lighten the burdens of the people. We have already seen how he mourned over the death of the empress, for whose mausoleum he erected the celebrated Taj Mahal; and for seven years before his death, he was imprisoned in his own palace, by his son Aurungzebe.

After him the Mogul dynasty dwindled away, until it became a mere appanage of the East India Company. The reader may well be startled by the suddenness of its decadence; but in this it does not differ from any other Mohammedan power. Where is the splendid magnificence of the Caliphate of Bagdad? Where the Fatimite dynasty in Egypt? And where, but for the European powers, whose jealousies prop up dead dynasties on the thrones of Turkey and Persia to-day, would be those Mohammedan empires? Where, too, is the throne of Tamerlane at Samarcand? And what is the condition of Tunis and Morocco in the West? It is easy to say that other empires have had their rise and fall, and so also these; but no empire that has fallen has fallen without a cause; and these form no exception. It may be said that their fate proves that "they that take the sword shall perish by the sword." A more complete reply is: They fell, because, in the very nature of things, they could not stand. The elements of which they were composed made prosperity impossible, for—

First. They trampled on the rights of man. Instead of admitting that manhood gave to every man the right to live, and seek his own happiness, so long as he did not infringe on the rights of his neighbor, they held that no man had a right to live unless he was a Moslem, or purchased immunity from death, by tribute. The sect or nation that thus sets itself in opposition to humanity, cannot prosper. It would be an argument against Providence if it did. The same divine law that makes it impossible for a nation of robbers or pirates to prosper, forbids a Mohammedan nation to do so, unless it practically

[1] Conqueror of the world. [2] Light of the world. [3] Dr. Allen's *India*, pp. 103–114.

renounces that article of its creed. But that is a fundamental principle of Islam.

Second. It may be replied: But they believe in God? That depends on what is meant by faith in God. If by it is intended an intellectual apprehension of the abstract idea of the unity of God, that they have; but if love to God is included, that they have not; for, "if a man love not his brother, whom he hath seen, how can he love God, whom he hath not seen?" And so their abstraction is lifeless.

Third. In common with many forms of idolatry, Mohammedanism tramples woman in the mire by its legalized polygamy, and all its attendant abominations. The writer can never forget a scene in Mosul, in 1843. A Moslem woman came to Dr. Grant for medicine for her little boy, ten years of age. She was unusually prepossessing in appearance, and was still young. As the doctor was busy, he did not notice her at first, and she began to plead, among other things, "He is all I have!" "What! have you forgot your husband?" "Husband!" she repeated; "can a husband love? He is a stranger to me, and I to him. Ah! the religion of Christ is better than ours. It does not tolerate such evils." Others had been taken into the harem since her, and she was cast aside; while her more favored rivals did their utmost to embitter a life already crushed. Even her son had been trained to despise her; and while she was pleading for him with the doctor, he was mocking her appeals, and ordering her to "shut her mouth." After receiving medicine for him, she began to tell her own ailments; but their roots were too deep for medicine. It was a little incident, but it gave a sad insight into the suffering hidden behind the windowless walls of a Mohammedan city. Does the reader point to the Taj Mahal? That told of love for an individual, whose personal excellence had awakened something like love in a sated voluptuary; but the harem contained just as many inmates as before, and just as imbruted. The virtues of Moomtaj availed only for her own elevation; her sex were no less slaves than before. And a religion that thus destroys the homes of a people, destroys the foundation of all prosperity.

Fourth. Mohammedanism is a religion of unmingled selfishness. It has nothing but hatred and contempt for those outside its own pale; and within that, it makes men Pharisees of the Pharisees. No follower of the Talmud is more devoted to quibbles about things lawful and forbidden. Is it replied that the Koran enjoins almsgiving? Yes; but why? Is it for the sake of the poor who are relieved? Not at all. But solely for the sake of the reward it is expected to bring to the giver — thus turning even that show of benevolence into the worst of selfishness. It appeals to no higher motive than the promotion of one's own interest. It knows no other.

Fifth. It is destitute of that spiritual life that is in Christ, and can come from him alone. If he said to his own, in daily communion with him, "As the branch cannot bear fruit of itself except it abide in the vine, no more can ye, except ye abide in me," much more is it true of these.

Sixth. Its false doctrine of inevitable fate, independent of human agency, cuts the sinews of public prosperity, and makes a nation without energy. The

only enthusiasm it is capable of is enthusiasm in slaughtering those who repudiate its dogmas; for, as the reward of that, they expect the delights of a sensual paradise.

Seventh. This utter selfishness, when crowned with even such transient prosperity as marked the Mogul empire in India, unhinges the faith of men in God, and leads to a reckless scramble for a share in the spoils. Hence "truth falls in the streets, and equity cannot enter." Men learn to lie; and sin brings few retributions in this life more dreadful than when a nation ceases to be truthful, and no man can rely on the word of his neighbor. Yet this is the character stamped by every false religion on the nation that receives it; and it is preëminently true of Islam and the nations cursed by its presence to-day.

When such a system intruded itself among the Hindoos, bringing with it only slaughter and oppression, it is no wonder they did not love it. What was there in it to call forth their love? Its costly splendor was nourished by the robbery of their own possessions. And if —

> "High though his titles, proud his name,
> Boundless his wealth as wish can claim,
> Despite those titles, power and pelf,
> The wretch, concentered all in self,
> Living, shall forfeit fair renown,
> And, doubly dying, shall go down
> To the vile dust from whence he sprung,
> Unwept, unhonored, and unsung" —

it is not strange if a whole dynasty of such characters passed away unregretted, or that the plundered even enjoyed the despoiling of their plunderers by the hordes of Nadir Shah.

Dr. Allen passes from the Mohammedan into the European period; and here his pages become intensely interesting, for they give full accounts of incidents already familiar, and give them, too, in their connection with each other. The beginnings of the Portuguese, French, and English power in India are spread out before us. The horrors of the Black Hole of Calcutta are given in detail. The romantic career of Lord Clive, from a simple writer sent out by the East India Company, until he became the head of their government in India, is given in full; and so is the career of Warren Hastings, doomed by Edmund Burke to immortal infamy. Lord Cornwallis, of Yorktown celebrity, also passes across the stage; and so through a host of others, from Bombay to Burmah, and from Cashmere to Cape Comorin, down to the year 1850, the whole covering one hundred and forty-five 8vo pages; or, if we include his account of the government and European population, sixty-two pages more — two hundred and seven in all. Without following him through this deeply interesting history, let us content ourselves with a glimpse of Papal missionary effort, and of the secular enterprise of Protestant countries, here afforded.

Vasco da Gama sailed from Lisbon for India in July, 1497, only five years after the discovery of America by Columbus. His first voyage effected little, and he awakened great indignation by carrying off several natives to Portugal.

The next enterprise, under Alvarez Cabral, in 1500, carried eight Franciscan friars, who, according to their own historian, DeBarros, were instructed "to carry fire and sword into every nation that would not listen to their preaching." Certainly a little different from the sort of instructions given by the American Board to its missionaries. It meant something, however, in view of the twelve hundred men in the thirteen ships that formed the expedition. Cabral, annoyed by the Mohammedans at Calicut, plundered one of their ships, and they, in turn, attacked the Portuguese factory, and killed fifty out of seventy of its inmates. Then Cabral seized ten ships, and, after plundering their cargoes, burned them, and cannonaded the city — strange mixture of war and missions. After his return, the king of Portugal, by authority from the Pope, assumed the title of "Lord of the navigation, conquest, and commerce of Ethiopia, Arabia, Persia, and India," and proceeded to take possession of those countries, peaceably if he could, forcibly if he must. Fifteen ships now sailed under Vasco da Gama; and, on nearing India, he took a large Moslem ship, and after plundering it, fastened the crew in the hold and set it on fire, burning alive, according to Lafiteau, three hundred persons. At Calicut he collected fifty natives, and threatening to put them to death if his demands were not complied with in an hour, coolly carried out his threat. Then mutilating — some say fifty more — by cutting off a hand or foot, sent them ashore, and bombarded the city.

In 1505 a large fleet, under Francesco Almeida, after some encounters with the Egyptian fleet, attacked the city of Dabool, and besides giving it up to plunder and massacre, set it on fire. Neither age nor sex were spared. The streets streamed with blood, and in a few hours the city was a smoking ruin. The wife of the governor could not purchase his life with the offer of all her wealth. Children were torn from their mothers' arms, and their brains dashed out against the walls; so that the cruelty of the Portuguese became a proverb in the land.

It was their custom to plunder all ships found without a license from themselves; and if any city refused to trade with them on their terms, they attacked it. Three times during five years they did this to Calicut, burning, destroying, and making slaves of the crews of the ships taken. More than seventeen other cases of similar attacks are recorded on one page (164), between the years 1507 and 1531.[1]

What could the Hindoos think of a religion that lent its authority to such doings?

Is it said that the English were also cruel, unjust and treacherous? That is true; and Dr. Allen covers up none of their misdeeds — neither the glaring wrongs of Clive, or Hastings, nor the grinding oppression of Lord Cornwallis, who required three fifths of the produce of the land as tax from its cultivators, and required it in cash. His no less unjust law that the official Zemindars should be counted the proprietors of the lands of which they had been only the tax-gatherers, is not covered up; nor the unjustifiable dealings of other governors with the natives. The wicked dealings of French with English, and

[1] Dr. Allen's *India*, pp. 152–166.

English with French, are also laid bare. The wonder is that Hindoos ever consented to receive a religion introduced among them under such auspices; but there is this wide difference between the two cases: In the one, all the wrong, cruelty, and bloodshed were committed under direct and explicit authority from the Pope, whose missionaries were on board the fleets, guilty of the outrages. In the other, men without the pretence of any ecclesiastical authority, but as individuals, bent on their own gain, or banded together exclusively for that purpose, were guilty of grave misdeeds; but they claimed no church authority for them. On the contrary, when Protestant missionaries came, they were at once ordered away, and the attitude of the East India Company was at first that of decided hostility to all missionary effort. Even the good men whom they sent for to minister to their own spiritual needs could not at first do anything for the natives, however much they desired it; and began to do so only in a very cautious way, as any one may see who reads their biographies — so that there is no parallel between the two cases. The truth is, there was as decided antagonism between the old East India Company and Protestant missionaries as there is to-day between the emissaries of the Pope in heathen lands and the missionaries of the Gospel of Jesus Christ; and it is well for the cause of Christ to-day in India that it was so; for no missionary zeal could have overcome the prejudice awakened by alliance with such a body.

HISTORY OF CHINA.

The chapter in the *Middle Kingdom* on the history and chronology of China[1] is full of interesting information on matters which we outside barbarians know little about. It is not the only chapter relating to history, in the broad sense of a Macaulay; but this one relates especially to the rulers and their personal history.

Dr. Williams first refers us to works which treat of the subject — such as Mailla, and Pauthier, Du Halde, Grosier, and Gutzlaff; then states that though some Chinese historians preface their histories with much that is mythical, yet they themselves do not receive it as sober fact, and their real records are much more worthy of credit than such legends would imply. The ancient history of China is clearly distinguished from her mythological history.

Chinese historians begin with the creation, which they suppose was effected by the retroactive agency of the yin and the yang — the male and female principles — which first outlined the universe, and then were influenced by their own creations. Heaven was a chaos; but order was produced, and out of it came the universe. The male principle (yang) first formed the heavens, and the heavier matter coagulated and formed the earth, while from the subtle essence of heaven and earth the dual principles yin and yang were formed, and from their joint action came the four seasons; and these produced all terrestrial objects. The condensed effluence of the yang produced fire, and that again the sun. The condensed exhalations of the yin produced water, and that the moon; and the seminal influence of sun and moon the stars. It is not strange that this explanation was too transcendental for the common people, who pre-

[1] Vol. II, pp. 193–229.

ferred the story of Pwanku, toiling with mallet and chisel for eighteen thousand years among huge masses of granite, fashioning the universe. Heaven, earth, and Pwanku each grew six feet every day till he died; then his head became mountains, his breath winds and clouds, and his voice thunder; his limbs produced the four poles; his veins rivers; his sinews the undulations of the earth's surface; and his flesh the fields. His beard was turned into stars; his skin and hair into herbs and trees; and his bones and marrow into rocks, metals and precious stones; his dropping sweat increased into rain; and lastly, the insects that infested his body were changed into men and women! Such is the lucid idea the Chinese have of the creation. Pwanku was succeeded by three monstrous forms called the celestial, terrestrial and human rulers, who continued another eighteen thousand years, and invented all useful things. These were followed by Yu chau and Sui jin, the last of whom, like Prometheus, invented fire.

This mythological period ends with Fuhhi, whom some identify with Noah. According to the Chinese, he flourished in B. C. 2852, or 1152 after the creation, according to Usher; or, according to Hales, who agrees better with Chinese dates, B. C. 3155. Chinese history begins three hundred and three years after the deluge, and forty-seven years before the death of Noah; and possibly some of his descendants found their way to China in less than three hundred years after the flood. Fuhhi and his seven successors reigned seven hundred and forty-seven years. The common chronology brings the deluge thirteen years after the accession of Yau, and the death of the last of the seven, B. C. 2205, or twenty-five years after the dispersion at Babel; but according to Hales, one hundred and twelve years before the call of Abraham. These eight kings would then be cotemporary with the patriarchs between Shem and Abraham, from Salah to Nahor. The capital of Fuhhi, near Kaifung fu, in Honan, favors their entrance through the Kiayü pass, in Kansuh.

It is worthy of note that the Chinese fix the establishment of the sexagenary cycle in the sixty-first year of Hwangti, B. C. 2637, five hundred and eighteen years after the deluge. It was invented by Yau the Great.

Three reigns intervened between Hwangti and Yau, but nothing is recorded of their doings, only that they were elected by the people, like several of the judges of Israel. A great deluge occured in the reign of Yau, B. C. 2293. But Dr. Williams inclines to regard it as a local overflow of the rivers in the north of China. The kings thus far may be tabulated as follows:[1]

Names.	Length of Reign.	Began B. C.	Other Events.
1. Fuhhi	115	2852	The deluge B. C. 3155.
2. Shinnung	140	2737	Death of Noah, B. C. 2805.
3. Hwangti	100	2697	
4. Shauhau	84	2597	Death of Arphaxad, B. C. 2715.
5. Chiuenhiuh	78	2513	Death of Shem, B. C. 2555.
6. Kuh	78	2435	From B. C. 2715 to B. C. 2082, sixteen dynasties ruled in Egypt.
7. Yau	102	2357	
8. Shun	50	2255	

[1] Do., p. 203.

The Chinese Dynasties.

I. Yu, the first of the Hia dynasty, B. C. 2205, is said to have been nine cubits high, a little more than Og of Bashan; and a rain of gold is said to have occurred in his days, which may have been a meteoric shower. Kieh Kwei, B. C. 1818, the last of the said dynasty, is said to have been a cruel and oppressive voluptuary. He made a large pond of wine, at which three thousand could drink at once, surrounded by pyramids of viands, which no one might touch till intoxicated. Drunken quarrels were common, and the vilest orgies were practiced in the palace; while those who remonstrated were either killed or exiled. The people rose up in their wrath and dethroned him.

II. The Shang dynasty began B. C. 1766, one hundred and twenty years before the Exodus, and reigned six hundred and four years. The first of this line, Chingtang, is said to have worshiped Shangti, the name given to the Supreme Being. Images are not mentioned till B. C. 1198, or four years after the death of Samson. Chausin and Tanki are represented as counterparts of Nero and Messalina, and were dethroned by

III. Wu Wang, the founder of the Chau dynasty, B. C. 1122. Like Chingtang, a worshiper of Shangti, he removed the capital to Singan fu, in Shensi. Duke Chau is said to have invented the compass, B. C. 1112.

These three dynasties, Hia, Shang, and Chau, extended from B. C 2205 to B. C. 249, or from the residence of Terah in Haran to the reigns of Antiochus Soter and Ptolemy Philadelphus, who translated the Septuagint. During the first, occurred the call of Abraham, and the descent of Jacob into Egypt. During the second, the Exodus and the death of Samuel; and during the third, the accession of Saul; the return of the Jews from Persia; and the accession of Alexander the Great.

IV. The next dynasty, the Tsin, lasted only three years, B. C. 249, B. C. 246.

V. Chi hwangti, the first of the After Tsin dynasty, B. C. 246, has been called the Napoleon of China. His capital was Hienyang, on the banks of the Hwai. He drove the Huns into Mongolia, and built the great wall. He also destroyed all the records of his predecessors, that he might appear the first emperor; and even buried alive five hundred of the *literati*, that he might not be reproached for the vandalism.

VI and VII. Kautsu founded the Han dynasty B. C. 202, and literature flourished during his reign. The removal of the capital to Lohyang occasioned a split, called the Eastern Han dynasty. Christ, the Prince of Peace, was born during this period — during the reign of Pingti,[1] — and the Western world was consolidated under Rome. During the reign of Mingti, A. D. 65, the deputation was sent west that brought back with them Buddhism from India. This king and his successor, Chingti, sent their armies as far west as the Caspian Sea, where they heard of the Romans.

VIII. The After Han dynasty began A. D. 211, and continued till A. D. 265.

[1] The Emperor Peace.

IX. The Tsin dynasty then came in, and flourished till A. D. 317; though Shensi was under the Hans till A. D. 352.

The Eastern Tsin dynasty, which removed the capital to Nanking, and was Buddhist in religion, reigned till A. D. 450. During this time Constantine built his eastern capital on the Bosphorus, and Attila invaded Italy.

Then follow several dynasties:

XI. The Sung, from A. D. 420 to 479.

XII. The Tsi, from that date till A. D. 502.

XIII. The Liang, till A. D. 557.

XIV. The Chin, till A. D. 589; and

XV. The Sui, till A. D. 618.

XVI. The celebrated Tang dynasty then began its reign of two hundred and eighty-seven years. These were bright years for China, though "Dark Ages" for Europe.

During the reign of Tai-tsung, A. D. 627, schools were established, an accurate edition of the Chinese classics published, and a code of laws drawn up. The empire also was extended from Kansuh as far as the Caspian Sea. Sogdiana, part of Khorassan, and the region of the Hindoo-kush, obeyed him. Nipal (Nepaul) and Magadha (Bahar) in India — even the Emperor Theodosius — sent embassies to Singan fu in A. D. 643, carrying presents of rubies and emeralds. Nestorian missionaries also came, and the emperor built a church for them at his court, and examined translations of their books. He also invaded Corea; but only after his death did his son complete its conquest. None of his successors equaled him, though the empress of his son showed energy enough — not always righteously, or well.

XVII. Then followed several dynasties; as the After Liang, till A. D. 923. XVIII. The After Tang, till A. D. 936. XIX. After Tsin, till A. D. 947. XX. After Han, till A. D. 951; and XXI. The After Chau, till A. D. 960.

XXII. The Sung dynasty then succeeded, from A. D. 970 to A. D. 1127. Under this the Tartars drove the Chinese south of the Yellow River in A. D. 1118, and retained all north of it till A. D. 1235.

XXIII. The Southern Sung dynasty, so designated from that loss, continued till A. D. 1280. Then Southern China was also subdued with great slaughter, and

XXIV. The Mongol Chief Kublai Khan founded the Yuen dynasty in that year. He was energetic and magnificent; dug the grand canal, and had Marco Polo to admire and record his greatness.

XXV. The Mongols were expelled in A. D. 1368, and the Ming dynasty was founded by Hungwu, or Chu Yuenchang. He established his capital at Nanking, and reigned thirty years. Yungloh, his son, removed the capital to Peking, and framed the code of laws which is still in force.

During the reign of Kiahtsing the Portuguese came to China, and in 1580 the Jesuits arrived. About this time the Manchûs, or eastern Tartars, began to threaten the empire, and overran the northeastern provinces, but did not overturn it till A. D. 1644, when Shunchi, the Manchû Khan, inaugurated

XXVI. The Tsing dynasty. He subdued the Chinese so thoroughly as to

compel them to wear the queue, which has been borne ever since as the badge of submission to the Manchûs, though many at first lost their heads rather than submit to it.

Kanghi, who ascended the dragon throne in 1661, showed a vigor, prudence, and success, that made his name illustrious. He reigned sixty-one years — longer than any of his predecessors, save one — and extended the empire to Kokand and Badakshan on the west, and Tibet on the southwest, consolidating it, and marking it with that stability that has produced the impression abroad of the unchangeableness of Chinese institutions. He subdued the Eleuths, and other tribes near the Celestial mountains; settled the frontier between China and Russia; carried out a mathematical survey of the empire; and in his reign there was published a dictionary of the language. His son, Yungching, who succeeded in 1722, sought to put down Christianity and restore ancient usages. Kienlung followed in 1736, and reigned sixty years, during which he managed to annex Tibet, under cover of aid against the Nepaulese. Kiaking ascended the throne on the abdication of his father in 1796, and his reign of twenty-five years was disturbed by insurrections and pirates. Taukwang succeeded him in 1820, and had a constant succession of troubles. Turkestan rebelled in 1828; there were insurrections in Formosa and in Kwangtung in 1830; and war with England in 1840. Heenfung followed him in 1850, who was succeeded by Tungche in 1859, and he in turn by Kwangseu, the present emperor, in 1875, then a mere child in his fourth year.

Table of the Emperors of the Ming and Tsing Dynasties.

Title.	Accession.	Years of Reign.	Contemporaries.
1. Hungwu	1368	30	Tamerlane. Richard II.
2. Kienwan	1398	5	Manuel Paleologus. Henry IV (England).
3. Yungloh	1403	22	James I. Henry V.
4. Hunghi	1425	1	Amurath II. Henry VI.
5. Siuentih	1426	10	Albert II. Cosmo de Medicis.
6. Chingtung	1436	21	James II. Nicholas V.
7. Kingtai	1457	8	Mahomet II. Edward IV.
8. Chinghwa	1465	23	James III. Ferdinand and Isabella.
9. Hungchi	1488	18	Bajazet II. James IV.
10. Chingtih	1506	16	James V. Henry VIII.
11. Kiahtsing	1522	45	Solyman II. Mary. Philip II.
12. Lungking	1567	6	Selim II. Elizabeth.
13. Wanleih	1573	47	James I. Henry IV.
14. Taichang	1620	1	Othman II. Philip IV.
15. Tienki	1621	7	Amurath IV. Charles I.
16. Tsungching	1628	16	Innocent X. Frederic the Great.
1. Shunchi	1644	18	Mahomet IV. Cromwell.
2. Kanghi	1662	61	Charles II. Clement IX.
3. Yungching	1723	13	Mahomet V. George II.
4. Kienlung	1736	60	Osman III. George III.
5. Kiaking	1796	25	Selim III. Napoleon.
6. Taukwang	1821	29	Mahmoud. George IV.
7. Heenfung	1850	9	Victoria. Alexander II.
8. Tungche	1859	16	A. Lincoln. Abdul Aziz Khan.
9. Kwangseu	1875		U. S. Grant. M. Grévy.

The whole number of emperors in the twenty-six dynasties during four thousand seven hundred and thirty-two years, from B. C. 2852 to A. D. 1880, or from Fuhhi to Kwangseu, is two hundred and forty-six; giving to each dynasty an average of one hundred and eighty, and to each monarch an average of nineteen and one third years. In England, during the seven hundred and seventy-one years from William the Conqueror to Victoria, there have been thirty-four sovereigns, averaging twenty-two years and two thirds of a year to each reign.

The mere reader may find this *résumé* of Chinese history rather tedious; but the student will, it is hoped, find it a valuable aid, especially toward an intelligent understanding of the many references in works on China to dynasties whose date and character are unknown to ordinary readers.

Dr. Williams, in the closing chapters of the *Middle Kingdom*,[1] gives a very elaborate, impartial, and discriminating history of the origin of the so-called opium war between England and China, in 1840 — its progress and results. But it is impossible to give even a *résumé* of them, as so much depends on the accurate statement of minute details. The chapters are well worthy the study of all who love to note the methods of that wonderful Providence which deals with the greatest complication of wrongs in a way to correct the evils of all, and make them productive of the greatest possible good. The unjustifiable attempt of a Christian people to force a poisonous drug on a heathen empire has been fully exposed — we wish we could add forsaken — and the blind arrogance of an ignorant nation has been most effectually rebuked. The issue is sure to furnish another endorsement of the truth that the kingdom of God shall come, while guilt and retribution are measured by the degree of light resisted, and the amount of truth "held [down] in unrighteousness."

As to the population of China, see *Middle Kingdom*, Vol. I, pp. 206–239. Dr. Williams thinks that it is less now than in 1812; for the Taeping rebellion probably destroyed twenty millions. He would not place it much higher than three hundred and forty-three millions.[2] Dr. Happer estimates the present population at three hundred millions.[3]

ASHANTI.

Dr. J. L. Wilson makes several valuable contributions to our knowledge of the history of Africa, besides an account of its ancient races, and a *résumé* of Phœnician attempts to circumnavigate that continent.[4] He goes very fully into the history of Portuguese discoveries in Western Africa, the doings of that nation in connection with the slave trade, and their other commercial relations with its people.[5] The early enterprises of the English, French, and Dutch in the same region, come in for their share of attention.[6] But we pass on to his notice of Ashanti, as a specimen of his contributions to African history.[7]

Originally a small district, Ashanti grew till it covered an area nearly three hundred miles square. Osai Tutu, one of the most renowned of her kings, and his successors, during the eighteenth century added to it Buntuku and Denkera

[1] Chapters xxii, xxiii, Vol. II, pp. 468–604. [2] *Missionary Herald*, 1879, pp. 50, 51.
[3] Do., 1881, p. 85. [4] Do., pp. 13–22. [5] Do., pp. 33–45. [6] Do., pp. 45–69. [7] Do., pp. 157–173.

on the northwest, Sarem on the north, and Axim and Warsaw on the south. The origin of the people is unknown, and the time when they first took possession of their territory. Their language is essentially the same with that of the Fantis, and so are their physical characteristics. Probably both tribes were driven from the valley between the Kong mountains and the upper waters of the Niger, by the Mohammedans. The Fantis crossed first, followed and attacked by the Ashantis, till the help of Europeans enabled them to hold their own. Ashanti alone of Western African kingdoms has a history; and that goes back only to the opening of the eighteenth century. At that time their weapons were the bow and spear.

Osai Tutu, after two desperate battles, routed the army of Denkera, and slew its king, whose bones, stripped of their flesh, became fetiches at Kumasi. The king of Axim, the ally of Denkera, lost an immense number of soldiers; and in a third battle his army was utterly destroyed. He became tributary, and promised four thousand ounces of gold toward the expenses of the war. Failing to pay this, he was attacked again; but Osai Tutu was killed, and his harem and court taken captive. The army took a terrible revenge for the loss of its leader; and, though they never recovered his body, sacrificed hosts of their foes to his *manes* at the capital. Osai Tutu was much beloved, and great confusion ensued at his death; many tributary tribes improving the opportunity to shake off the yoke.

Osai Apoko, his brother, at length became king, and subdued the rebels, besides quelling a conspiracy at home; dying in 1742, he was succeeded by his brother, Osai Akwasi. He engaged in war with Dehomi, now the only rival of Ashanti. The king of that tribe had induced three provinces to revolt and join him; but Osai Akwasi defeated them all in a battle near the Volta. Crossing that river into the heart of Dehomi, he suffered an equally signal defeat himself; and, dying soon after of his wounds, his nephew, Osai Kudjoh, ascended the throne in 1752. He was immediately called to suppress an extensive revolt, and not only succeeded in that, but subdued additional provinces, till even the king of Dehomi sent to congratulate him, and seek his alliance. When he became old and infirm, the smothered flames again broke out; and before his army could march to subdue the rebels, he died.

His grandson, Osai Kwamina, succeeded him in 1781, and vowed not to enter his palace till he had the heads of the leaders of the revolt; and they are still to be seen among the trophies of Kumasi. He, however, was deposed for favoring Mohammedanism. Osai Apoko II began to reign in 1797; but the kings of Gaman and Kongo united to reinstate the deposed king, and in the first battle the new king met with a severe defeat. Another battle followed, in which he was victorious, though he soon after died, and gave place to his brother, Osai Tutu Kwamina, about 1800.

In the course of a few years he fought a battle at Kaha with two Moslem chiefs, who had burned the capital of Banna, a tributary province, and completely routed them, one of them dying of his wounds in the Ashanti camp. This battle added the Moslem provinces of Ghofan and Ghobago to the pagan kingdom of Ashanti. The king also subdued Gaman, and consolidated his kingdom.

Two tributary chiefs of Axim now took refuge among the Fantis, whom the king requested to surrender them. Their reply was the slaughter of his messengers, which called forth an invasion, and the combined armies of Fanti and Axim were defeated. The chiefs now pretended to be about to submit, but really only sought time to prepare for another battle, and again put his messengers to death, which led the king to swear that he would never return to Kumasi without their heads. He invaded Fanti, and wrought a desolation scarcely paralleled in history. Towns were destroyed; all ages and both sexes were butchered, and provisions of every kind destroyed. The Fantis fled to the shelter of the English forts on the coast, but the king followed them to the gate, cut to pieces the population of the town, and assailed the fort itself, despite the deadly fire of its guns. Night, however, stopped his advance. Still the walls were mined, all ready for explosion, when a flag of truce was displayed from the fort. One of the offending chiefs escaped during the negotiations, but the other was delivered up, and afterwards subjected to most cruel tortures at Kumasi. Not less than twelve thousand persons are supposed to have fallen that day. This was in 1807. Four years later the king sent an army to Elmina to defend that town from the Fantis; but no marked results followed.

In 1817 he invaded the Fanti country a third time, and reduced the people of Cape Coast to such straits that the English governor thought it best to pay the fine the king had imposed on them; whereupon the Ashantis withdrew.

These repeated incursions so interrupted trade that the English sent an envoy to Kumasi, to negotiate a treaty of commerce. The Ashantis had no quarrel with the English, but only with the Fantis, who became insolent, relying on the forts for help. The result was that the four ounces of gold paid monthly by the English, as rent to the Fantis, was paid over to the king of Ashanti. Mr. Hutchinson went to Kumasi as British Resident, and Mr. Dupuis was sent from England as Consul to Ashanti, to promote commerce with the interior. On his arrival at Cape Coast, Ashanti was at war with Gaman. Mr. Hutchinson had returned from Kumasi, and the appointment of Mr. Dupuis did not please the local authorities. Soon the news of the defeat of the king led to great rejoicing among the Fantis, which, if not favored, was yet not rebuked by the English; and other insults were offered by the Fantis, which the governor refused to notice, though pointed out to him by the king, and matters became threatening.

Mr. Dupuis, long thwarted, was now permitted to set out on his embassy. He was kindly received, and a treaty made, equally advantageous to both parties. But on his return to the coast the treaty was set aside, and the British naval officer, siding with the authorities, refused to send the king's commissioners, whom Mr. Dupuis had brought with him from Kumasi, to England. So the latter sent word to the king to be patient till he heard from England; and himself went there to expedite affairs.

The charter of the African Company was now abolished, and Sir Charles McCarthy appointed Governor-General of the British Possessions on the Gold Coast. He found everything in confusion in March, 1822. The ambassador

of the king, having waited two months beyond the time set by Mr. Dupuis to hear from England, had returned, and the place was virtually under blockade. Had Sir Charles known the true state of things, his course had no doubt been more pacific; but he was misled by the Fantis, and his name resounded along the whole coast as their deliverer. The king looked on all this with sullen silence, and in secrecy prepared for war on a large scale.

At first a negro sergeant in the British service was carried off and put to death. This led to reprisals; and hearing that the king was on his way to the coast, the governor resolved to meet him; but, unfortunately, without waiting for the arrival of some regular troops, he crossed the Prah with such an army of natives as he could muster.

Next day, January 21, 1824, the war-horns of the Ashantis sounded to battle. A heavy fire was kept up most of the day, and the English ammunition began to fail. The Ashantis, however, were driven back by the bayonet; but some who had crossed the river higher up attacked the English army in the rear, and cut it to pieces. Sir Charles, being wounded, fell back to where the king of Denkera still stood his ground, and tried to check the advance of the Ashantis, by bringing a field-piece to bear on their thickest ranks; but they pressed on steadily and irresistibly, till Sir Charles and his officers were slain. His secretary was taken prisoner, and locked up every night in a room with the heads of his master and associates. It is said the heart of Sir Charles was devoured by the chiefs, in order to imbibe his courage; and his flesh was dried and eaten by their subordinates, for the same object. His bones were long kept in Kumasi as national fetiches. Capt. Raydon was sacrificed to the town fetich. Two other staff officers, who had not been able to reach the field in time, now hastened to put Cape Coast castle in a state of defense. The allied army, though thirty thousand strong, could not be induced to make another stand; but the Ashantis, instead of pressing their advantage, made overtures of peace through the Dutch governor of Elmina. The Ashanti deputies there met the acting governor of Cape Coast, and assured him that the king wished no war with the English; only the surrender of the vice king of Denkera; and in token of their sincerity, they surrendered Secretary Williams, and suspended hostilities.

The vice king of Denkera meanwhile crossed the Prah and attacked the Ashantis; and the English followed up this bold stroke, only to be driven back to the gates of Cape Coast castle. At this crisis a reinforcement arrived, and another desperate battle was fought before the arrival of the king from Kumasi, but with no decided advantage to either side; then, as the natives were unwilling to do more, the troops were withdrawn into the fort. Soon the new king arrived, and marched his army up in full view of the fort. Every preparation was made for defense. The marines of the men-of-war and the sailors of other vessels were landed, a large native force was collected, and in the battle that ensued both sides fought with desperation till night separated them. The engagement would have been renewed next day, but dysentery and small-pox compelled the king to retreat. The other side was not much better off, and but for the arrival of rice from England more would have died of famine than in the war.

The Ashantis now found that there was another nation as strong as themselves; and in subsequent battles cannon and grape-shot turned the scale.

Sir Neill Campbell, a new governor, came with peremptory orders to put an honorable end to the war. The Fantis would fain have humbled the Ashantis still more, but the governor was firm. Peace was secured, and the Ashantis were required to deposit four thousand ounces of gold at Cape Coast, to purchase ammunition for the allied army, should they provoke another war, besides sending two of the royal family as hostages to Cape Coast. This was not done, however, till 1831, when his son, and the son of his predecessor, with six hundred ounces of gold, were sent as security for the good behavior of the king. And thus the Ashanti claim to the government of the country of the Fantis was virtually renounced.

Both of these young men were afterwards educated in England, and are now in Ashanti; one of them is a missionary.

This fragment of West African history shows how nearly the history of a savage African tribe resembles that of the most civilized nations, in being mainly a record of war and violence.

It also shows the opportunities missionaries have for learning the facts of history, and the intelligence and impartiality with which they improve them. Dr. Wilson "nothing extenuates, nor sets down aught in malice." He is allied to one side by the ties of race and religion, and to the other by the interest the missionary feels in the people, to benefit whom he consecrates his life. A historian from Cape Coast might not have held the balances so evenly.

KINGDOM OF CONGO.

Dr. Wilson, however, has written a chapter of history more appropriate for the present volume, in his account of the kingdom of Congo.[1] It was discovered by the Portuguese about A. D. 1485. It lies on the south side of the river Congo; bounded on the east by the mountains of Matamba,[2] which divide it from the savage Giaghi,[3] west by the Atlantic, and south by Angola. It extends two hundred and fifty miles along the coast, and three hundred and fifty into the interior. It was divided into six provinces: Sogno,[4] Bamba, Pembe, Batta, Pango, and Sundi; whose chiefs the Portuguese called dukes, counts, and marquises. Sogno and Bamba were the largest, the latter as large as Sicily, and the former still larger, and more important as the *entrépot* of commerce. San Salvador, the capital,[5] was in Pemba, fifty Italian miles south of the Congo, and one hundred and forty miles northeast of St. Paul de Loando. It was situated on the summit of a mountain, and counted healthy for Europeans. Here were the headquarters of the missionaries, and of many Portuguese merchants; and in the early part of the seventeenth century, it is said to have contained forty thousand inhabitants. The palace was of wood, partly enclosed by a stone wall. For many years a bishop and chapter, a college of Jesuits, and a convent of Capuchins, were supported here by Portugal. Besides a large cathedral, were ten smaller churches. The other important

[1] *Western Africa*, pp. 313–346.
[2] Query: Dembo of Stanley?
[3] Query: Enkoji of Stanley?
[4] Sonyo of Stanley.
[5] Congo, or Grundy, of Stanley.

towns were the capitals of Sogno and Bamba, neither of which had more than six or eight hundred houses. In both were convents of Capuchins, and in Sogno six churches. This was the seaport of Congo. Diego Cam, who discovered the river and kingdom of Congo, hurried back to Portugal to report his discovery, and the king and court were so interested in it that he was sent back with three Dominicans. Two of these soon died, and the third was some years after killed by the Giaghi, while chaplain of the army of Congo. On his third voyage Diego took with him twelve Franciscans. The count of Sogno and the king of Congo were among the first converts. The latter was very zealous till he found that he would have to give up his harem, when he returned to heathenism. His son and successor was a devoted Papist, and when his heathen brother excited a rebellion, St. James was seen fighting for the king, and victory of course was his. His brother, taken captive, refused to turn Papist, and was executed. Soon after a large reinforcement of missionaries was sent out by the Society de Propaganda Fide, and in the course of twenty years the entire population of Congo were within the pale of the Papal Church.

In the middle of the sixteenth century the army of Congo was scattered like chaff before the warlike Giaghi, and San Salvador was burned. The king then appealed to Don Sebastian of Portugal for help, and Don Francis Gouvea was sent with some seven hundred troops. As soon as he was joined by three hundred more from Angola he attacked the invaders, and after several battles drove them from the kingdom. Don Alvaro I, in his gratitude, promised the king of Portugal an annual present of slaves, and offered to acknowledge him as sovereign; but this last was generously declined.

The missionaries, reinforced by new recruits from Europe, reëstablished Popery throughout Congo, and extended their labors into neighboring tribes. North of the Congo they were very successful in Loango and Kakongo. The capital was rebuilt, commerce was more extended than before, and the country more prosperous than ever; but in 1636 civil war broke out between Congo and Sogno, occasioned by an effort of the king to transfer Sogno to the crown of Portugal. This excited the indignation of the people of Sogno, and the king, with a large army and eighty Portuguese, made war on the recusants. In the first battle the army of Sogno was beaten, and the count slain. His son, however, continued the war, and not only defeated the royal army, but took the king and many Portuguese prisoners. These last had the choice of death or slavery, and choosing the first, were immediately executed. The king obtained his liberty by acknowledging the independence of the count, and ceding to him additional territory.

Soon after the king renewed the war, but with no better success. He even sought the aid of Prince Maurice, then in Brazil; but the count sent another messenger in the same ship, with presents of equal value, and the prince decided to remain neutral. The missionaries were now driven out of Sogno across the Congo; but some of their followers seized the count and drowned him in the river near the place where he had driven out the missionaries. On the other hand, Don Alvaro II sent to Pope Urban VIII for more missionaries; twelve were sent, part of whom went to Sogno, and the rest were welcomed

by Don Garcia II, who by this time had ascended the throne. He was succeeded by Don Antonio I, whose wickedness and brutality nearly extirpated Popery from the land. The Portuguese of Angola were roused to attack him with an army of one or two thousand natives and four hundred Portuguese. The missionaries affirm that the king had nine hundred thousand men! But this is incredible, especially as the main army was entirely routed by four hundred Portuguese musketeers. Don Antonio was killed, and his crown taken to Loando. They did not seize on the kingdom, however, for the kings of Congo had generally been as obedient to the Pope as the king of Portugal himself; and they had all been crowned according to the Popish ritual, and the crown itself was the gift of the Pope.

Order was soon restored, and another king ascended the throne. Father Carli, in 1667, saw the great duke of Bamba, the leader of the royal forces, soon after disbanding an army of one hundred and fifty thousand, with which he had failed to subdue the count of Sogno. Twenty years later and that great duke had also renounced allegiance, and we hear no more of the kingdom of Congo. Cut off from the sea, both by way of the river and Loando, the king sank down to the level of the petty chiefs round about him.

This chapter of history derives its chief importance from its connection with the question of the permanence of the results of Papal missions. It is said that their failure in India is owing to the ascendency of a Protestant nation there. England rules India, and, therefore, Papal missions are at a disadvantage. But the East India Company opposed Protestant and Papal missions alike, and now even idolatry is guaranteed all its rights. The courts protect the worshiper of Brahma as impartially as the servant of Jesus Christ. Popery has free course in England herself, so far as any political oppression is concerned; and what hindrance does she meet with from the government in India? So it has been said that Popery failed among our own Indians, because these tribes have been overshadowed by more powerful races, without allowing time for the development of its peculiar principles. But the same hindrance lies in the way of Protestant missions among the Cherokees, Choctaws, Chippewas, and Dakotas. Why does it not in their case produce the same results? If there has not been the same success among the tribes that murdered Dr. Whitman, Rome knows better than all others why it was wanting. But even there, despite her efforts to stamp out the fire of the truth, travelers find Indians who read God's Word and observe family prayer. Why, then, is the kingdom of Congo, which, according to her own missionaries, was for more than two centuries as completely under her influence as any kingdom in Europe, so blotted out that no relics of its Christianity can be found to-day? Rome here had the field all to herself, with nothing to interfere with her, and everything favorable politically, and what are the results? During the eighteenth century every trace of Christianity disappeared, and the whole region has fallen back into the darkest heathenism, and even into greater poverty and weakness than before the coming of the missionaries. Stanley, though he passed along the northern frontier of this kingdom for more than three hundred and fifty miles, and spent nearly two months on its borders, never once even mentions its name — so utterly has that once flourishing Papal kingdom perished from the earth.

Capt. Tuckey, who explored the lower part of the Congo in 1816, states that three years before, some missionaries had been murdered in Sogno, and a Portuguese pinnace cut off by the natives; but he found no traces of Popery, except a few crosses and relics mixed up with native charms and fetiches, no doubt scattered by the Portuguese slave-traders, who still frequent the river. One man introduced himself as a priest, with a diploma from the college of Capuchins at Angola, without education, and having a wife and five concubines! The nearest allusion Stanley makes to the kingdom of Congo is the following:[1] "Some natives of Congo were here, and it appeared to me, on regarding their large eyes and russet brown complexions, that they were results of miscegenation, probably descendants of the old Portuguese and aborigines."

We know not the extent of the civilization of Congo; but Prof. Carl Ritter states on the authority of the missionaries, that the great duke of Bamba could at any time raise in that province four hundred thousand soldiers. Dr. Wilson doubts whether the king himself could raise more than twenty thousand. And if that is true, do not such statements by the Papal missionaries go far to explain the utter disappearance of their work? It was the structure of wood, hay, and stubble, built on the one foundation that we are forewarned should be burned. — I Cor. iii : xv.

What are the facts? The missionaries and Portuguese planted gardens, cultivated fruit trees, and erected substantial dwellings and churches; but *the people* still lived in bamboo huts, and were clad in the scantiest apparel, while multitudes wore no clothing at all. Their roads were mere foot-paths; and the one between the capital and Loando was so infested with wild beasts that the traveler required an armed escort. They had no beasts of burden, nor carriages, nor occasion for either, for their commerce was mainly in slaves; showing that they had not felt the quickening power of true religion in secular activities.

We know not the number of missionaries, though Father Merolla mentions incidentally at least one hundred, representing almost every order in the Papal Church. In the province of Sogno were eighteen churches; and in the whole kingdom not less than a hundred, and perhaps twice as many places set apart for worship.[2] The king and chiefs vied with each other in their attendance on mass, and scrupulously observed the ceremonies of the church. Nor were the people in these things behind their leaders. One missionary states that in a village the women rushed on him like "mad women," to have their children baptized. When an adult woman presented herself for baptism, surprise was expressed that one had so long neglected the ordinance; and one complains that he found no children to baptize, because another priest had just preceded him.

Then the authority of the priests in all civil, as well as religious matters,

[1] *Through the Dark Continent*, Vol. II, p. 426.

[2] The view here inserted of St. Paul de Loando, from the *Missionary Herald*, 1880, p. 486, shows some of these churches and ecclesiastical establishments as they appear to-day, in that neighboring province. Loando is a city of ten or twelve thousand inhabitants, one third of them being whites. It was once the great shipping port of slaves to Brazil. Now the city is connected with Lisbon by a monthly line of steamers, and with Liverpool by another line. Its lawful trade in the products of the country is quite extensive.

was paramount. No acts of penance were ever inflicted by Rome on the sovereigns of Europe, in the Dark Ages, that were not submitted to by the chiefs of Congo.

Nor was this a transient excitement. Successive generations of missionaries labored with untiring assiduity for two hundred years. Some of them were among the most able and learned ever sent forth from Rome.

And what is the end of it all? A people that in morality, industry, comfort, and intelligence, are lower to-day than millions in Africa who never heard the name of Christ.

What is the explanation of this? Is the African incapable of being civilized and Christianized? The fruits of Protestant missions among them show that

ST. PAUL DE LOANDO.

that is not true. Is it said that the Portuguese power declined? Very true. But are there, therefore, no Portuguese traders in Congo? And if traders, why not missionaries too, where their churches once filled the land? For the same reason the climate cannot be the cause; for traders live there in spite of that same climate. There are more foreigners there now than there ever were missionaries at any one time. Besides, if a mission cannot live after being nursed by royal nursing-fathers for two centuries, when can it live with a vitality of its own?

Does not the character of the religion planted there explain the mystery? Instead of translating the Bible, crosses and relics supplanted the charm and the fetich. Instead of instructing in the truths of the Gospel, the outward

form of baptism was the power that transformed heathen into Papists — we cannot say Christians. The heathen mind is proverbially slow in apprehending Bible truths; but one missionary in Chiava chianza baptized five thousand children in a few days. Another baptized twelve thousand in Sogno in less than a year. Father Merolla states that in less than five years he baptized thirteen thousand; another missionary fifty thousand; and a third, during twenty years, more than one hundred thousand.

Being thus made Papists, the mass was celebrated, the confessional erected, penances imposed, and the people learned — what? To make the sign of the cross, and wear medals, while ceremonies resembling their heathen customs took the place of those customs.

It may be questioned whether it is worth while to send the Gospel to the heathen, if it produces no better results or lays no surer foundation for Christian character. The new religion had no more to do with their moral and intellectual natures than the old one. If they showed reverence for Papal rites before the missionaries, they were no less punctilious in their own pagan observances behind their backs.

Laboring among such an ignorant people, the missionaries gave full swing to their Romish miracles. Devils fled at their coming; trees withered under their rebuke; if a comet appeared, it came at their call; if the small-pox broke out, that also was to chastise the disobedience of their followers. But the missionaries forgot that African sorcerers wrought miracles even more wonderful. In energy, in scope of intellect, and in mechanical skill, the negro yields at once to the white man. But in the realm of the unknown and the mysterious, where imagination has full scope, he has no rival;[1] and so the missionaries only brought themselves and their religion into contempt. So long as they confined themselves to the requirements of baptism and the rosary, they were obeyed; but when they assailed polygamy, they were astounded at the opposition they called forth, and then they found the weakness of their power. What could they accomplish who left "the Gospel of Christ which is the power of God unto salvation" out of the list of their instrumentalities? They then had recourse to that constant resource of Rome, the secular arm; and from that moment they threw aside every other means for advancing their work. The severest laws were enacted against polygamy, the heaviest penalties were visited upon any who took part in heathen rites. Sorcerers were declared outlaws, were burned alive, or sold into slavery. If the chiefs were slow to execute the laws, the missionaries took the law into their own hands, and carried it out with unsparing severity. Corporal punishment was administered without restraint. Slight infractions of church rules were punished by public flogging, sometimes inflicted by the missionaries themselves, and even mothers were stripped and flogged in public.[2]

[1] We have an inkling of this in the Voodooism of our own Southern States.

[2] As some may find it difficult to believe that any professed servants of Christ should so far forget themselves, let them read this part of a letter from the celebrated Francis Xavier to the king of Portugal, dated January 20, 1548; "I very earnestly desire you to take an oath, invoking most solemnly the name of God, that if any governor neglects to spread the faith he shall, on returning to Portugal, be imprisoned for a number of years, and all his property be sold and devoted to works of charity. Then, that none may deem this an idle threat, you must declare

The countenance the missionaries gave to the slave trade — and that in the scene of its most savage atrocities, where whole villages were surprised, resistance put down by the sword, and the miserable residue sold into a foreign bondage from which there was no return — was doubtless one main cause of their failure. They even participated in it themselves. Idolaters were given up to them, and by them sold to the slave-traders. After that, it mattered little that the price of blood was given to the poor. So many were thus disposed of that masters of slave-ships could always depend on the missionaries for aid in making up their cargoes. Father Merolla tells that he presented a slave to a captain in return for a flask of wine given him for the sacrament; and provided the slave was baptized, and was not sold to heretics, they saw no evil in the traffic. No wonder such missionary work came to naught.

So long as the power of the king was with them, and that was upheld by the power of Portugal, they practiced and prospered; but the moment Portugal felt constrained to withdraw her help, and the power of the king of Congo grew weak, the hatred of the people against the missionaries broke forth. The count of Sogno revenged himself on them for the indignities he had been made to suffer, and the people abandoned them on journeys in the most dangerous places, or in sickness they refused to help them. In Bamba six missionaries were poisoned at one time, and an attempt was made to kill a seventh, who came for their property. Philip da Silesia was killed and eaten. Father Joseph Maria da Sestu was poisoned. Merolla himself almost died from the same cause. So that they seldom traveled without an antidote for poison; and all this after two centuries of unbroken prosperity, as they deemed it. Then they abandoned traveling, and ultimately left the country, and when they departed Popery disappeared with them. How could a building stand that had no foundation, or a tree grow that had no root?

EARLY MISSIONS TO INDIA AND CHINA.

The intelligent Christian who reads of the Nestorian monument discovered in China,[1] desires to know more of the missionary labors of that ancient church, and several documents prepared by those connected with the American Board, though they do not satisfy, stimulate that desire exceedingly. Let us bring together some of the facts they furnish.

Mar Shimon has for his title "Patriarch of the East," and the following facts go to show the appropriateness of the designation.

Judea was the original center of the kingdom of God, and the history of events occurring there were given in detail. It was not so with occurrences in regions more remote. The Acts of the Apostles are almost exclusively confined to a history of the labors of one man not belonging to the original twelve.

unequivocally that you will accept no excuses; but that the only way to escape your wrath is to make as many Christians as possible. The only reason why every man in India does not confess the divinity of Christ, and profess his holy doctrine, is the fact that the governor, who neglects to make this his care, receives no punishment from your majesty." *Missionary Life and Labors of Francis Xavier*, taken from his own correspondence, by Rev. H. Venn, B. D., London, 1862, p. 161.

It is not strange that he solemnly proposed to the same king that the conversion of India should be taken out of the hands of missionaries and confided to the civil authorities. Do., p. 157.

[1] See pp. 172-173.

Other apostles also labored, but we have little or no account of their labors. Yet, if Paul, besides his abundant labors in Asia Minor and Greece, as well as Syria, had his mind fixed on a journey into Spain also, the extreme west of the ancient world, is it not natural to suppose that other apostles in like manner extended their labors to the east? True, we have no record of those labors, but neither is it said that they did not go forth in obedience to the command, "Go ye into all the world and preach the Gospel to every creature;" a command addressed more personally to them than to the subsequent apostle. We have a hint, however, of a church at Babylon, as well as at Rome, and Corinth [I Peter v: xiii]. Then we know that, while there were none from Greece or Gaul present on the day of Pentecost, there were Parthians, and Medes, and Elamites, and the dwellers in Mesopotamia. The thoughtful reader will have noticed that these are mentioned first, as though those lands were the most important, most populous, and best known; with whom, also, there was the most frequent intercourse. We cannot forget that in this direction lay the most ancient empires, more ancient than even Egypt; and roads were then open that now have long been closed.

The sources of information concerning the progress of the kingdom in these regions during early times are indeed meager to-day. There was no press to chronicle the labors and sufferings of missionaries in apostolic times; and the ruthless hand of war has often blotted out church and home alike, and buried all records of church labor in the bloody graves of them that performed it. But the progress of modern discovery is now moving in this direction. There is more known to-day than was known a few years ago, and the old secular ruins of Ephesus, and Ilium, of Babylon, and Nineveh, can claim no monopoly of interest. The kingdom of Christ moves on under the eye of its divine head, and he can bring to light in his own time the records stored up in his secret treasury concerning his church, as well as those relating to the ancient empires of Assyria and Parthia. Moultan was the ancient Malli, Herat was the ancient Aria or Artacoana; Samarcand, then called Maracanda, was once a chief mart of commerce. Still more important was Bactra, the predecessor of the modern Balkh, "which, lying on the Oxus, at an equal distance from China and the Mediterranean, and near the gold region of India, was the heart of the Asiatic trade."[1] The ancient *topes*[2] in countries adjacent to Cashmere and Cabul, enclose ruins containing sometimes treasures and ancient coins. Inscriptions on some of these date from the most ancient period of Persian history. Dr. Lord obtained in Kunduz, north of Afghanistan, and west of the Himálayas, two silver paterae of exquisite Greek workmanship — genuine relics of Alexander's kingdom of Bactriana, and a Greek coin of King Eucratides, the son of Heliocles and Laodice.[3] Throughout this region relics of almost every ancient nation are sown profusely in the soil.

Such facts enkindle hope in two directions. First, they show how intercourse in ancient times was maintained between western and central Asia; and second, if the relics of the classic age are thus brought to light in those

[1] *Chinese Repository*, 1849, p. 488.

[2] Query: Teppés?

[3] Burnes' *Journey to Cabul*, p. 72.

comparatively inaccessible regions, may we not hope for similar souvenirs of a Christian antiquity to reward more thorough exploration?

Let any one look at the ground covered by that statement in Acts ii: 9, and he will see reason for expecting rich discoveries to follow a better acquaintance. Mesopotamia lay between the Euphrates and the Tigris; Elam was situated northeast of the Persian Gulf; Media occupied a place between that and the Caspian Sea; and Parthia lay to the east of that sea, toward India and China. Now, if lines of connection between the Gospel of Christ and those remote regions were formed so early as the day of Pentecost, A. D. 33, is there not reason to suppose that the movement, thus providentially begun, went forward to some extent, if not *pari passu*, with like movements toward the west? Joining the caravans of commerce, apostles may have traversed these ancient routes, healing the sick, casting out devils, and preaching the Gospel of the kingdom in a way fitted to make a deep and wide impression throughout Asia that that kingdom had indeed been set up on the earth. Ancient tradition tells us that the fingers to whose touch Christ offered the print of the nails, and the hands which he invited to explore his side, were stretched forth in these lands to point others also to the Lamb of God that taketh away the sin of the world.

Both Greek and Syrian writers affirm that the apostle Thomas preached the Gospel in Hyrcania, Margiana, and Bactria. These countries, with Parthia, lie east of the Caspian Sea, south of the river Oxus — called also Jihoon and Amoo Dari — and west of the head-waters of the Indus. They say, also, that the Gelæ, a people between the Caspian Sea and the sea of Aral, received the Gospel from a disciple of the apostles. Sophronius says that Andrew, the apostle, preached in Scythia, and in Sogdiana, which lies between the Jihoon and Jaxartes, and is also called Transoxiana.[1] Gregory of Nazianzen says[2] that Thomas preached the Gospel to the Indians;[3] and Neander also mentions a tradition which makes him an apostle to the Parthians. But he is very cautious about giving credit to these witnesses, saying in the words of Carl Ritter:[4] "What European science cannot prove is not, therefore, to be rejected as untrue, but only to be regarded as problematical for the present; by no means, however, is any structure to be erected on it as on a safe foundation."

The Syrian chronicles relate that "Thomas, having gone through Mesopotamia, Chaldea, Persia, and Parthia, and visited the churches in those countries, went to the utmost confines of the East;" and in the epitome of the Syrian canons, quoted by Assemani, he is called "the apostle of the Hindoos and Chinese."[5]

If, however, the apostle Thomas ever was in these regions, we should expect to find some trace of his labors. What traces yet may be discovered we cannot tell; but in the year 1806 Rev. Dr. Claudius Buchanan found Christians on the coast of Malabar, having the Scriptures in the ancient Syriac — the language spoken by our Lord — with churches, clergy, and a ritual, who claimed to have

[1] Dr. Anderson, in *Missionary Herald*, 1838, p. 291. [2] *Oratio*, p. 25.
[3] Neander's *History*, Vol. I, p. 82. [4] *Erd-Kunde von Asien*, Bd. IV, *1ste Abtheilung*, s. 602
[5] *Chinese Repository*, 1847, p. 154.

received bishops from the church at Antioch almost from the time of the apostles — Dr. Buchanan says for thirteen hundred years previous to A. D. 1503. While the writer was in Mosul he formed the acquaintance of Joseph Matthew, a priest of this body of Christians, who had come to be ordained bishop by the Jacobite patriarch at Deir Zafran, and who returned to his people as Mutran[1] Athanasius. He was a simple-hearted, evangelical Christian, who heartily coöperated with our mission in Mosul, and seemed to be devoted to the spiritual good of his people.

And this leads to the remark that we mistake in supposing these Syrian Christians to be Nestorians. True, the Nestorians sent missionaries afterwards, even to China, and these Christians in Malabar use the Estrangelo character, which is rather peculiar to the Nestorians; but the fact seems to be that the church in Malabar was established before the division of the ancient church of Antioch into Nestorian and Jacobite, and so it continued to go to the patriarch of Antioch, as the Jacobite patriarch is still called, for the ordination of its bishops. Dr. Anderson in his "Missions of the Nestorian Christians in Central and Eastern Asia,"[2] already quoted, says[3] that the patriarch Jaballaha sent a metropolitan to Maru (Merw), in Korassan, in the year 420 A. D. This shows that there were numerous Christians and churches already in that province; but it also shows that Nestorius had nothing to do with it; for he was not made bishop of Constantinople till A. D. 428, nor deposed by the council of Ephesus till 431. All this missionary work in the East must have been before Nestorius was known to the original Syrian church that afterwards espoused his side in the dispute with Cyril.

In the year 334 A. D., Barsabas, a Syrian Christian, *i. e.*, one belonging to the church of the patriarch of Antioch, fled into Korassan from the persecution of Sapor, king of Persia, and there became bishop of Maru (Merw).[4]

But to return to these Syrian Christians. Dr. Buchanan gives an exceedingly interesting account of their Christian simplicity; their churches, with bells cast by themselves; their women, so different from the heathen around them; and their child-like attachment to the Word of God. He also describes the persecutions they endured at the hands of the Papists, who, when they discovered them in 1503, demanded their subjection to the Pope. "Who is the Pope?" was the reply; "we never heard of him. We are of the true faith — whatever you may be — for we came from the place where the disciples were first called Christians." The Inquisition at Goa was let loose on them.[5] Their bishop, Mar Joseph, was sent prisoner to Lisbon. The rest of the clergy were accused of being married, and observing only two sacraments; also that they neither invoked saints, nor worshiped images, and had no orders in the church, save bishop, priest, and deacon. These errors they were required to abjure or suffer suspension from the ministry. All their ecclesiastical books were burned,

[1] Metropolitan. [2] *Missionary Herald*, 1838, pp. 289–298. [3] Do., p. 291.

[4] Assemani *Bib. Orient.*, Vol. IV, p. 426, quoted by Dr. Anderson, in *Missionary Herald*, 1838, p. 291.

[5] This reminds the writer that a manuscript fasciculus of the records of the Inquisition at that place, that had long found a place among the curiosities in the cabinet at the old Missionary House in Pemberton Square, strangely disappeared one day, after the visit of a clerical stranger, who was allowed access to the room unattended. Rome does not like to have documents where they may expose the falsehood of her denials of unpleasant facts.

"in order," said the Inquisitors, "that no pretended apostolical monuments may remain."

The churches near the coast were compelled to submit; but those in the interior took refuge with the native princes, who improved the opportunity to reduce them to poverty, till Christians in England rallied to their help after Dr. Buchanan's discovery of this persecuted church.

Now the Syriac liturgy of this church in the office for the celebration of St. Thomas, says: "By the blessed St. Thomas the error of idolatry vanished from among the Hindoos. By the blessed St. Thomas the Chinese and Chushiths[1] were converted to the truth. By the blessed St. Thomas they received the sacrament of baptism and the adoption of sons. By the blessed St. Thomas they believed and confessed the Father, the Son, and the Holy Ghost. By the blessed St. Thomas they kept the faith of the one God. By the blessed St. Thomas the illuminations of the life-giving doctrine arose upon all the Hindoos. By the blessed St. Thomas the kingdom of heaven was extended and opened to the Chinese." And in an antiphone they say: "The Hindoos, the Chinese, the Persians, and other regions, they of Syria, Armenia, Greece, and Rome, offer memorials of celebration to the sacred name of Thomas."[2] This is certainly claiming for him a great deal, and must be interpreted as meaning simply that he laid the foundations for such magnificent results.

Antonius Govea writes of the traditions current among the Syrians of Malabar: "Thomas, the apostle, say they, having arrived at Cranganor, continued some time with the king of Malabar; and when he had founded many churches there, went to Culan, a city of the same country, and there brought over many to the faith. Then he went to the country now called Coromandel, and, having converted the king of Meliapore, and many people to the Christian faith, went thence to China, and preached the Gospel in the city of Cambalu,[3] and there built a church." "On his return, on account of the numerous conversions of people to the faith of Christ, two Brahmans, moved with hatred, excited an uproar against the apostle, and buried him under a shower of stones. Another Brahman, perceiving that he was yet alive, thrust him through with a lance."[4] They say his body was carried to Calamina,[5] near Meliapore, and buried there.

The metropolitans of these Syrians in Malabar retain the name of China in their titles. When the Portuguese went there, Mar Yakob subscribed himself Metropolitan of Hindoo[6] and China; and so did Mar Yoosuf, who died at Rome. Trigautius says that the most ancient title of this church is "Metropolitan of all Hindoo and China."[7]

The inquiry remains: How much are these statements and quotations worth? To determine this we must follow back the line of the centuries, and see how far back we can trace this Syrian church in Malabar.

[1] Ethiopians?

[2] Assemani, Tom. III, part ii, p. 516, quoted in *Chinese Repository*, 1847, p. 156. See a similar statement by Du Halde, do., p. 158.

[3] Peking.

[4] *Chinese Repository*, p. 157.

[5] Is this the mina, or harbor, of Cala? and the same as Calicut, *i. e.*, Kali's Ghat, or landing-place, identical with the meaning of Calcutta, in Bengal?

[6] Hindostan.

[7] *Chinese Repository*, p. 157.

Cosmas, surnamed Indicopleustes, on account of his travels in India, found Christians at Taprobane,[1] at Male, where the pepper grows,[2] and Calliana. Neander, who quotes him,[3] says this was perhaps Calcutta. But the site of Calcutta, previous to its foundation by the English, in A. D. 1690, was occupied by the mean village of Govindpour. It was much more likely Calicut, a seaport of this same Malabar, where those churches still exist.[4] Indeed, one does not see how it well can be anything else. This, then, confirms the existence of churches in Malabar in the year 585 A. D., and even before that; for, though Cosmas wrote in that year, he had visited the country several times in previous years, and only then recorded the result of his observations; and the churches were then numerous and well-established, with ordained clergy, a state of things that in that age could not have grown up all at once.

Going still further back, Theophilus, a native of Diu, a city on the western coast of India, north of Bombay, to quote the words of Neander,[5] "found here still existing the Christianity *which had been already planted in that region at an earlier period.*" Now Theophilus had been sent as a hostage to Constantinople, during the reign of the emperor Constantine the Great, who became sole emperor in 323 A. D. Here, then, in the early part of the fourth century, we find churches still existing in India, dating back from a much earlier period; and if here, may there not have been also in other places, according to the above extract from their ritual? Though we must make much abatement from the sweeping generality of its statements.

The last evidence to be adduced is a fact mentioned by Dr. Buchanan, in his account of *Syrian Christians in India*. He speaks of "six metal tablets belonging to them, the engraving on the largest being thirteen inches long by about four broad. Four of them are closely written on both sides, making in all eleven[6] pages. On the plate reputed to be the oldest is writing engraved in nail-headed or triangular-headed letters, resembling the Persepolitan or Babylonish." Dr. Buchanan tells us that copperplate *fac-similes* of these tablets were deposited by him in the library of the university in Cambridge, England. When Neander wrote, they were still undeciphered; but now that cuneiform inscriptions are made to yield up their secrets, we may hope that these, if not already deciphered, soon will be.[7]

While we are groping after knowledge relating to them, it is interesting to see how the Chinese spoke of the West. They seem to have called the Roman empire Tatsin, or the Great Tsin (China). The Orientals spoke of China as Tchin and Matchin, or Tsin and Matsin, just as they call Tartary Jagiug and Magiug (Gog and Magog),[8] and the Chinese counted the magnificence of Rome

[1] Ceylon. [2] Malabar. [3] *History*, Vol. II, p. 117.

[4] *Chinese Repository*, 1849, p. 494. [5] *History*, Vol. II, p. 117. [6] Ten?

[7] A letter to Prof. A. H. Sayce, of Queen's College, Oxford, brings the answer that "the metal tablets mentioned by Dr. Buchanan have no bearing on the subject. They must be some of the metal tablets of which so many exist in southern India, inscribed in ancient forms of the Dravidian alphabet, and varying in date from A. D. 600 to A. D. 1300. For an account of them consult Burnell's *Elements of South Indian Palæography*, where the early Dravidian alphabets are deciphered, and the metal tablets, and palm leaves on which they are inscribed, are translated. *Fac-similes* are also given of some of these plates. The inscriptions generally relate to grants of land. But they have nothing to do with the Christians."

[8] *Chinese Repository*, 1847, p. 154.

a reflection of their own. They supposed it to be ten thousand li[1] west of Shensi, and also west of the Western Sea. The capital, they said, was a hundred li[2] in circumference. They seem to have known it in the time of the republic, for they represent the king as elective; and the character used in books they describe as of a strange form! Here is a specimen of their fables: "In the north of Tatsin, a species of sheep is produced spontaneously from the earth, their navels being joined to the soil. If anything is struck near them, and they are frightened, they instantly die. In the forests are found birds from whose saliva is formed jasper-colored pearls. Conjurors lift their feet, and pearls and gems drop from them." They also give a singular account of the manner of collecting coral.[3]

It is said that trade was carried on by sea between India and Ngansih, with profits of a hundred-fold; and that, though the Romans desired to send envoys to China, the people of Ngansih hindered them. But what country that represented is not known. About the year 166 A. D., however, Antun[4] succeeded in sending an embassy, and another followed about 270 A. D. Such facts are interesting, as showing the difficulties attending communication, and yet its possibility.

The Nestorian[5] patriarchs are said to have sent metropolitans to China as early as the fifth century, which implies the existence of bishops and churches there, and that Christianity had been established for some time.[6]

This brings us again to the celebrated inscription of Singan fu, and here, having already described the monument, we confine ourselves to the history there set forth. It records that the mission entered China in the days of the Emperor Taicum. In the twelfth year of his reign, A. D. 639, an imperial edict was issued in favor of Christianity, a church was built by the emperor, and twenty-one assistants given to Olopuen. The mission prospered under the reign of Caocum, his son, A. D. 650–684, when churches were built in the ten provinces of China. Persecutions raged in A. D. 699, and also in A. D. 713, but peace returned under Hivencum. A second mission arrived in China under Kieho, John, and Paul, and the emperor Socum built a number of churches. Christianity also was favored by the emperor Taicum, A. D. 763–780, and his successor, Kiencum, or Tecum, A. D. 780–805.[7] The monument was erected in the second year of Kiencum, the seventh day of the month of Autumn, on the Lord's day, Himciu being bishop of the church of China. Syrian names, arranged in eight classes, and other particulars, are given in the *Chinese Repository*.[8]

Six metropolitan electors were appointed for the ordination of a patriarch, chosen from the six nearest dioceses, viz.: Elam, Nesib, Perath (Euphrates), Assyria, Beth Germa (Garmæ), and Halach (Holwan), who should convene with the patriarch every four years. But the other metropolitans, viz., of China, Hindia, Persia, of the Menozites, of Sciam (Siam), of the Raziches, the Hariuns

[1] Twenty-eight hundred miles. [2] Twenty-eight miles. [3] *Chinese Repository*, 1849 p. 491.
[4] Marcus Aurelius Antoninus. [5] Syrian?
[6] Mosheim, *Historia Tartarorum Ecclesiastica*, pp. 8, 9, quoted by Dr. Anderson, *Missionary Herald*, 1838, p. 292.
[7] The reader will note that the ending of all these names is the same. [8] 1847, pp. 161–163.

(Arians?), and Samarkand, which were far off, were excused from attendance, and required only to send letters every six years, giving a narrative of their affairs.[1]

A list of the Nestorian metropolitan seats is also given in the same volume, from Assemani, as follows: Elam, Nisibin, Perath mesin (harbor of the Euphrates), or Busra, Adjaben (Adiabene) and Mosul, Beth Germa, or Beth Selucia and Carach, Halavan, or Halach, Persia, Maru in Chorasan, Hara in Cumboja, Arabia, China, India, Armenia, Syria, Cardo (Kûrdistan?), or Adorbegen (Aderbijan), Raju and Tarbistan, on the shores of the Caspian, Dailem, Samarkand and Mavar al nahr, Cashgar and Turkestan, Balach (Balkh) and Tocharestan, Segestan, Hamadan, Chantelek, Tanguth in Great Tartary, northwest from China, and Chasemgar and Nuachet.

The patriarch Timotheus, A. D. 778, selected Subchaljesu from among the monks of Beth Aben, or Beth Abe, at the foot of Mount Niphates, north of Diarbekir — a man skilled in Arabic, Syriac, and Persian — and, ordaining him bishop, sent him to the Dailamites and the Gelæ, east of the Caspian; and at the same time wrote to the king of the Tartars, and others, exhorting them to become Christians. Subchaljesu had great success in his field, and penetrated as far as China, but was slain on his way back to Assyria. Timotheus without delay ordained Kardagus and Jaballaha, and sent them in his place.[2]

It is easy to write or read these statements; but when we remember that Peking is four thousand miles from Bagdad, and that a caravan spends six months in going from Samarcand to Peking, and that Marco Polo was a year on the way from Bokhara there, we get a glimpse of the difficulties of so long a journey among barbarous and hostile tribes, and the courage involved in the undertaking. Missionary journeys to-day are trifles alongside of those old Nestorian travels across the continent of Asia.[3]

Two Arabian travelers found Christians in China in the ninth century, and report that at the taking of Canfu by rebels, in A. D. 877, besides Chinese, one hundred and twenty thousand Moslems, Jews, Christians, and Parsees were slain.[4]

Mosheim says:[5] The Nestorians in the tenth century introduced Christianity into Tartary, beyond Mount Imans, and among the powerful horde called

[1] *Chinese Repository*, 1847, p. 163. [2] Dr. Anderson, in *Missionary Herald*, 1838, pp. 292-293.

[3] The reader who desires a full and thorough exposition of the traces of intercourse between China and the West, from the days of Isaiah (xlix: 12) to the present, will find it in the twenty-first chapter of that thesaurus of all that relates to China, the *Middle Kingdom* (Vol. II, pp. 417-467). Dr. Williams reviews the notices of it in Horace, Arrian, Ptolemy, Ammianus Marcellinus; The Chinese Embassy, A. D. 61 or 65; Changkiang's Expedition to the Caspian Sea, A. D. 126; The Mission of the Emperor Antoninus; The Arab Travelers Wahab and Abuzaid; Marco Polo; Mission of the Pope to the King of the Tartars, and Reply; Rubruquis; The Armenian Prince Haitho; The Arab Ibn Batuta; Journal of the Friar Oderic; A Chinese Work relating to A. D. 1506; Rafael Perestrello, the first European who sailed to China (1516); Ferdinand Andrade and brother (1517), and many subsequent Portuguese voyagers; Magaillans (1723); The Spanish admiral Legaspi (1543), and many more Dutch, French, Russians, Austrians, and English. There is a most interesting account of a Dutch pastor, Hambrocock, who became a voluntary martyr about the year 1660. Sent by a Chinese leader to persuade a Dutch fort to surrender, he exhorted his countrymen to hold out, as the enemy was growing weary of the siege, and then went back to his wife and children in the hands of the enemy, to be butchered, with five hundred of his countrymen, to whom he hoped to be of service in their last hours (pp. 440-441).

[4] Dr. Anderson, in *Missionary Herald*, 1838, p. 293, and *Chinese Repository*, 1849, p. 495.

[5] *Ecclesiastical History*, Vol. II, pp. 106, 138.

Karit, which bordered on the north of China; and in the eleventh century it is certain that metropolitans, with many inferior bishops, were established in Cashgar, Nuacheta, Turkestan, Genda, Tangût, and other places.

No mention is here made of the wonderful stories of a Prester John, for it is to be feared that there is only too much ground for the statement of Neander[1] that among the Mongols religion was a wholly subordinate concern, and that their only article of faith was the recognition of a God, and of the Great Khan, his son, whom he had set over men and required them to obey. This vague religion left the door open for all idolatry and superstition; and we are not surprised to find that Christian, Mohammedan, and Buddhist rites were all tolerated together in a looser way than Confucianism, Buddhism, and Tauism now coexist in China. It is not much to the credit of Nestorians that they lent themselves to such a degradation of him who is "God over all, blessed forever."

Brerewood says: "Many Nestorians are found in Parthia, and scattered far and wide in the East, as far north as Cathay, and as far south as India. Marco Polo mentions no other Christian sect in many parts of Tartary, as Cassar, Samarcand, Carcham, Chinchintalas, Tangût, Suchir, Ergimul, Tenduch, Caraim, and Mangi."[2]

If any ask why then do we find so little trace of them now? the first answer must be that of Mosheim:[3] "No one can suppose that the religion they taught was the pure Gospel of our Saviour." Neander says:[4] "They were often greatly wanting in theological culture, Christian knowledge, and substantial Christian character." He quotes William de Rubruquis,[5] who calls them thoroughly ignorant, repeating words which they do not understand, corrupt in their morals, and given to drunkenness, some of them even keeping several wives, like the Tartars. How much of *odium theologicum* enters into this testimony we cannot tell. He describes them as offering up prayer for the Khan, and pronouncing a blessing over his cups, and that, after them, Moslem and Buddhist priests did the same.

Dr. Anderson says[6] there is no reason to believe that they published the pure Gospel — perhaps, too, the means employed savored often of the world. Yet the comparative purity of the Nestorian Church to-day may be both an effect and a cause of its missionary activity in the past.

Such judgments may seem severe, but, though we have not all the information we would like concerning the missionary work of the Nestorians, straws sometimes show the direction and force of a current. When the patriarch Timotheus directed that, in order to conform to the rule requiring three bishops to assist in the ordination of a fourth, a copy of the Gospels should take the place of the third,[7] he showed a supreme regard to the commandments of men, worthy of a Pharisee of the Pharisees, and a sacrifice of common sense to form, that even the make-believe plays of children could not go beyond. Is it said, yet he honored the Gospels? No, he dishonored

[1] *History*, Vol. IV, p. 48.
[2] *Chinese Repository*, 1847, p. 165.
[3] Do., Vol. II, p. 106.
[4] Do., Vol. IV, p. 46.
[5] Do., p. 52.
[6] *Missionary Herald*, 1838, p. 296.
[7] Neander's *History*, Vol. III, p. 89.

them by making them party to a farce, or a fraud, according to the light in which it is viewed.

So when Unkh Khan asked the metropolitan of Maru how his people should fast, seeing they had no bread, but only milk and flesh, that ecclesiastic had a grand opportunity to show that "the kingdom of God is not meat and drink, but righteousness, and peace, and joy in the Holy Ghost." Instead of that, he referred the question to the patriarch, who decided that they should fast by living on milk alone![1] Could he have paltered in that way if he had felt himself, or desired the Tartars to feel, the power of the glorious Gospel of the blessed God?

It is some relief to find Mosheim saying[2] that the expositors of the sixth century "scarcely deserved the name, a few only excepted, and particularly the Nestorians, who, like Theodorus of Mopsuestia, searched for the true meaning of the words."

Another cause of their disappearance is the merciless persecution to which they were subjected by such men as Mahmoud of Persia, A. D. 997, and especially by the ferocious Tamerlane, who, in 1370, began his career of conquest, and subdued more kingdoms in thirty-five years than Rome did in eight centuries. It is enough to say of him that he ravaged Asia from one end to the other. As a robber, he sent, at one time, eight thousand camels laden with spoil from Damascus. As a destroyer of men, he built three hundred thousand human heads into columns and pyramids, the ghastly monuments of his ferocity.[3] When such an angel of death swept over the wide field of their labors, it is no wonder that so little remains to tell us what once was there.

THE MASSACRE OF THE MOUNTAIN NESTORIANS.

The material for this chapter of history is furnished mainly by the missionaries of the American Board, especially by the heroic pioneer in that mission, Dr. Asahel Grant. Mr. A. H. Layard visited their mountains in September, 1846, two years after our missionaries had left the field, and furnishes some facts not accessible elsewhere.

Territory. The country occupied by the Mountain Nestorians lies between 37° and 38° north latitude, and 43° and 44° 30′ east longitude. This region embraces the highest land between the valley of the Tigris and the plain of Oroomiah. The mountains of Jelu are from fourteen thousand to fifteen thousand feet in height, and others in neighboring districts do not fall far behind this. As for its barrenness, it would hardly be possible to overrate it. Dr. Azariah Smith, who was a very careful and accurate observer, after going through the mountains in all directions, pronounced ninety-nine parts in every hundred incapable of cultivation. The men in Jelu and Bass were in the habit of going down in winter to more favored climes to find employment, so as to eke out a subsistence through the year. The inhabitants of other districts did the same, though to a less extent. In the valley of the Zab the talus of loose

[1] Assemani, *Bibl. Orient.*, Tom. IV, p. 483, in *Missionary Herald*, 1838, p. 294.
[2] *Ecclesiastical History*, Vol. I, p. 407. [3] Gibbon's *Decline and Fall*, Vol. IV, p. 284, Harper's edition.

stones generally extend from the water up to the foot of the cliffs, without a particle of soil between them. The few thorn bushes (*Astragalus Tragacantha*) seem to come up from a scanty soil hidden deep below the stony surface, and the few plots of ground that have been rescued, with great labor, from the stones around them, though to sow them requires only a capful of seed, are sometimes watered by aqueducts built up for long distances from the river above, for nothing grows in all the region without irrigation. The villages are noted for their trees and vines, but they seem to be fully as much dependent on a plentiful supply of water as on any depth or richness of the soil.

The People. Little was known of them before the arrival of our missionaries, and their past history is still a blank. Their origin can only be guessed at from their language. They do not appear to be descendants from the ancient Assyrians, for their language is not Assyrian, but Syriac, related to the language of Bethuel and Laban, and to that spoken in Palestine in the time of our Lord, rather than to the language of the cuneiform inscriptions. Probably they were forced up from the more fertile lands on the western side of their sterile domain, and overflowed into the more attractive regions on the east, where a part of them are now found, but when, or by whom, is not yet known, though future discoveries may increase our knowledge on these points. It could not have been later than Tamerlane, and may have been much earlier. The ancient foundations at Kesta, and the ruins of the antique aqueduct there, may be the work of the ancient Assyrians.[1] So also may be the copper mine in the vicinity, spoken of by Mr. Layard[2] as furnishing the material used to color the bricks and ornaments in the palaces of Nineveh; and the copper bust of a female, crowned with a wreath, found in Salaberka while Dr. Grant was there,[3] would also seem to indicate an ancient population that had some intercourse with Assyria. Still, one cannot avoid the impression that only the direst necessity could have forced a people from the more inviting regions below up to these rough rocks and dreary solitudes.

Population. This has been overrated. Dr. Grant put it as high as one hundred thousand; but Dr. Smith, who was much more accurate in his statements, gives the following numbers of houses in several villages, which he ascertained by actual count: The villages of Berawola, eighty-nine; Chumba, twenty; ten other villages of that name, fifty; Besusina, eighteen; Bemeriga, fifteen; Bedyalatha, fourteen; Derawa d' Walto, nineteen; Matha d' Kasra, fifty; Serspidho, sixty-two;[4] Siyadhor, twelve; Rawola d' Nai, twelve; and several smaller ones.[5] Dr. Grant estimated Ashitha at three hundred;[6] Lezan at two hundred; Salaberka at one hundred and sixty; all of which were beyond question much larger than any counted by Dr. Smith; Zawitha and Merga sixty each, and Minyanish eighty. Nestorians gave Dr. Smith the number in Rumpta as ninety-one; in Kalayatha, thirty-six; in Dadush, thirty; and in Koo,

[1] *Dr. Grant and the Mountain Nestorians*, p. 324.
[2] *Nineveh and its Remains*, Vol. I, p. 190.
[3] *Dr. Grant and the Mountain Nestorians*, p. 186
[4] Layard says eighty; *Nineveh and its Remains*, Vol. I, p. 188.
[5] *Journal of American Oriental Society*, Vol. II, p. 68.
[6] Layard says two hundred families returned there in 1845; do., Vol. I, p. 156.

Legippa, and Mabua, as twenty each; altogether, fifteen hundred and twenty-two houses in forty-three villages of Tiary alone; and, as there was not less than an average of ten persons to a house, there were certainly no less than fifteen thousand inhabitants in that district, and may have been many more. Making out in the same way an estimate of the other districts, he made the entire Nestorian population in the mountains to be not far from fifty thousand.[1] Mr. Layard, in describing Tehoma, gives Birijai one hundred houses, Ghissa forty, and Tehoma Gawaia one hundred and sixty; or a population of about three thousand;[2] though besides these, there are the villages of Muzrai and Gunduktha, which would have increased the number. Dr. Perkins put down Bileejai, as he spells it, at fifty houses; Dizza forty; and Tekhoma[3] Gawaia one hundred and fifty. Muzra and Goondikta, he says, resembled in appearance Tekhoma Gawaia. He estimated the entire population at five thousand.[4] Bass he supposed to contain from two thousand five hundred to three thousand, of whom fifty families were in Erinthos, sixty in Shwava, forty-five in Mata, fifty in Argap, and thirty in Korhitch. In Jelu, to Nerek he assigns ten or twelve families, to Zeer eighty, to Oomer two hundred and fifty, and to Ishtazin two hundred in five villages.[5] All these estimates refer to their population in 1849, four years after the massacre in Tehoma.

Causes of the War. The roots of the war extend far into the remote past. It was hardly to be expected that two such races as the Kûrds and Nestorians could live together in peace. The former are noted both for cruelty and treachery. As an illustration of the former, it is sufficient to mention Mohammed Kûr Bey of Ravendooz, who, when his sleep, in summer, on the roof of his castle, was disturbed by the cries of his own infant daughter, took her by the arm and threw her into the deep river that flowed one hundred and fifty feet below.[6] And again: when one of his men denied that he had stolen and eaten a dish of yoghoort, the sword of the bey at one stroke laid bare the stolen property, and slew the offender.[7] Capable of such things among themselves, it is not to be supposed that the Mountain Nestorians would meet any mercy at their hands. A Kûrd in Jezireh told Dr. Grant that one of their chiefs, returning from an unsuccessful hunt, met a Christian, and, saying "This is my game," raised his gun and deliberately shot him down. "How could he act so?" asked the doctor. "O," was the reply, "you know we count it a great sowab (merit) to kill a Christian." And in that spirit Mohammed Kûr Bey attacked the Mountain Nestorians in 1833. But their hour had not then come; for a brave and united defense drove his hosts back with great slaughter; and it was when baffled in this attempt that he wreaked his vengeance on the unoffending Yezidees.[8] While Dr. Grant was with the emir of Hakkary, Nûrûllah Bey, in 1842, he sent half a score of his attendants to put to death a local governor, then a

[1] *Journal of the American Oriental Society*, Vol. II, pp. 67-58; *Dr. Grant and the Mountain Nestorians*, pp. 364-365.

[2] *Nineveh and its Remains*, Vol. I, pp. 174-175.

[3] Dr. Perkins' spelling.

[4] *Missionary Herald*, 1850, pp. 90-93.

[5] Do., pp. 93-95.

[6] Dr. Perkins, in *Journal of Oriental Society*, Vol. II, p. 91.

[7] *Dr. Grant and the Mountain Nestorians*, p. 222.

[8] See p. 308.

prisoner in a distant castle; and on their return they boasted to the doctor of the number of robberies and murders they had committed. One of them had just plundered a caravan. They learn the intended course of travelers, and then waylay them; and the inhabitants dare not warn their intended victims, lest they suffer in their stead. Ismael Pasha, former Kûrdish ruler of Amadia, was also at that time with the emir, arranging to ravage the villages belonging to Mosul, through the banditti of Zeiner Bey. The attempt that Mohammed Kûr Bey had failed to carry out, Nûrûllah Bey now proposed to accomplish, by the help of Badir Khan Bey, and the coöperation of the pasha of Erzrûm, with whom he was then corresponding on that subject. The emir, whose power would have diminished if the Nestorians had grown strong, was specially irritated by the attempt of Mar Shimon to assume a measure of political power that had not previously belonged to the patriarch, and this occasioned such a bitter animosity between them that Mar Shimon, finding the pleasant home of his predecessors, in Kochannes, too much exposed to his enemies, removed to Diss, where he could be better protected by his warlike clans. Here Dr. Grant found him on his first visit in 1839; and here the emir burned his residence in 1841, with the loss of everything he could not carry away in a hasty flight by night.[1]

But this did not satisfy him. Mar Shimon was still surrounded by his warlike mountaineers, while he was fettered by the faction of Suleiman Bey, the son of his predecessor, and a friend of Mar Shimon. Then the patriarch had abolished the ancient custom in Ashitha, and elsewhere, of making an annual present to the emir, and the latter never forgot it. He had gone to the extent of his ability alone, for his resources did not admit of raising and maintaining so large an army as was necessary to subdue the Nestorians; and so he turned for help to an ambitious neighbor, who had gradually extended his dominions on every side, till he had become the most powerful chief in Kûrdistan. A special grievance at this time favored his appeal. The Nestorians, in one of their forays, had killed two Bûhtan Kûrds, and their chief in turn killed four Nestorians; they retaliated by killing eight Kûrds, and just at this juncture Nûrûllah Bey applied for his help.

Badir Khan Bey, the chief of Bûhtan, to whom he applied, was nominally subordinate to the Turkish government, but he harbored the rebel Ismael Pasha, and built forts with one hand while he paid tribute with the other.[2] When summoned before the pasha of Mosul, his military appointment was his excuse for remaining with his army; and as long as he paid tribute, the Porte did not care about engaging in a costly war. In devotion to Islam he was hardly second to his dervishes and moollahs, who constantly inveighed against the infidel Nestorians, and declared their destruction such a work of charity as would be rewarded in paradise. "Kill all the men who will not receive the Koran; raise up a race of Moslems from their women; and train up the children in the faith of Mohammed — on whom be peace," was their constant counsel. He oppressed the Nestorians in Bûhtan without mercy, torturing some to death in the effort to exact more money than they possessed, and *fancying* the

[1] *Dr. Grant and the Mountain Nestorians*, p. 237.

[2] Do., p. 334.

mules and other property of others, who dared withhold nothing which he signified a desire to receive.[1] As early as 1841 he united with the emir in the attack on Diss already mentioned, and from that blow the Nestorians never recovered; indeed, by weakening their courage and dividing their councils, it did much to prepare the way for the massacre. From that time the emir had claimed their whole country as his own.

The Turks also shared in the desire to subdue a body of Christians, who, within the borders of their empire, had for centuries resisted the Moslem demand for tribute, and defied their swords; but how could they reach them, defended alike by their mountain fastnesses and the unsubdued Kûrds around them. At length Reshid Pasha so far subdued the Kûrds that the pasha of Mosul, in 1839, marched to Amadia with ultimate reference to the Nestorians. Mr. Ainsworth writes, under date of June 10:[2] "This day he pitched his tents within a mile of the town, and greatly did his officers rejoice as they spoke of the immediate and certain subjection of the Chaldean mountaineers." Page 253, he says the Hakkary chief "had thus been led to barter his independence for a recognition of his power by Hafiz Pasha of Erzrûm, and had returned, backed by the influence of Turkey, at once to control his own restless tribes, and also to extinguish the power of the patriarch, of which he had always been extremely jealous."[3] And Dr. Grant says:[4] "On my return to Julamerk, in 1840, Nûrûllah Bey had gone to form an alliance with the pasha of Erzrûm, to secure the subjugation of the independent Nestorians who lived within the bounds of that pashalic; on my way to Constantinople I met this chief at Van, with the new waly, who had been sent with immediate reference to that

[1] Do., p. 329.

[2] *Travels in Asia Minor*, Vol. II, p. 203.

[3] In this connection Mr. Ainsworth intimates that the new ties of friendship between Mar Shimon and the English and Americans had led to his being betrayed into the hands of the Turks, and expresses regret that his mission should have hastened that catastrophe; but adds, it is very remarkable that no mission was spoken of by the Americans among these mountaineers till after his arrival in Constantinople (p. 254). In reply to all this, it should first be stated that Mar Shimon, so far from being betrayed into the hands of the Turks, himself fled to Mosul from the Kûrds, and took refuge in the British consulate, and not with the Turks at all. The idea that friendship with Americans, at least, who always and everywhere professed to both Kûrds and Nestorians that they had no political aims, and could promise no political help, occasioned the war, may be regarded as equally truthful with the patriarch's betrayal into the hands of the Turks. As for the alleged fact that no mission was spoken of till after he entered Turkey, in 1839, it is enough to say that Messrs. Smith and Dwight were instructed in 1830 to "direct their attention to the Nestorian and Chaldean Christians of Kûrdistan (*Researches in Armenia*, etc., Vol. II, p. 175), and were only hindered from going to Mar Shimon by the united assurance of the English then at Tabriz, that the region was "entirely inaccessible." Then Dr. Perkins was instructed in 1833 "to go to Julamerk as soon as may be, *lest interested and perverse men should prejudice Mar Shimon against him.*" He was told that his residence was only for the present to be in Persia. These words in italics are very expressive in connection with the following extracts from Mr. Ainsworth (Vol. II, p. 249): "We informed the patriarch that there were among us many zealous Christians, who seemed to read the Bible rather to invent new doctrines and rebel against the church than to give them increase of wisdom and holiness, and have preferred following such doctrines rather than the bishops who are appointed to teach the nations—that these persons have seceded from the Church of England, and have corrupted the doctrines of Christianity—but as we do not think these corruptions so bad as to destroy the Christian faith, we do not call them heresies." And (p. 251): "Mr. Rassam informed them that if one of these ministers (Congregationalists) joined the Church of England he must be ordained (again), as the church considered them without apostolic ordination." And Dr. Grant was with difficulty held back from trying to enter the mountains, almost from his first entry into Persia, in 1835; from that day forward the idea of penetrating the mountains was never absent from his thoughts. For three years he laid scige to them, watching for the first available chance of entering their unknown interior. July 1, 1836, he wrote to the committee at Boston, urging the importance of entering at the first practicable moment; and again November 16. Indeed, he was constantly making inquiries of Kûrds, Persians, and Europeans, as to the possibility of carrying out his plans. (See *Dr. Grant and the Mountain Nestorians*, pp. 87–105.)

[4] *Dr. Grant and the Mountain Nestorians*, p. 373.

end, of which, indeed, he made no secret." And so Dr. Grant wrote in his *Nestorians, or the Lost Tribes*:[1] "They were, perhaps, never in greater danger than now of being subdued by the Moslem powers, who have pushed their conquests to the very borders of their mountains, and into these I have good reason to believe they intend to penetrate." On his return to Turkey, in 1841, he found these plans delayed by the removal of Hafiz Pasha from Erzrûm, and the death of the waly of Van; but the plan was not abandoned, and the emir had gone to secure assistance from Badir Khan Bey, who was the most efficient agent in their subjugation. Late in the autumn of 1841, the pasha of Mosul sent an army against them, which, however, owing to the severity of the season, effected nothing. The Nestorians then took their revenge in ravaging his villages in Berwer, and he consoled himself in forming more efficient plans for the spring campaign. These again were frustrated by the loss of Amadia, in a revolt of the Kûrds, while the pasha of Erzrûm was taken up with the threatened war with Persia.

The writer has been the more careful to state these facts, because they so completely disprove the charge that the massacre was occasioned by the building Dr. Grant erected in Ashitha, in 1842–1843, for the accommodation of the mission. It has been said that it was on "an isolated hill," whereas it was only on a projecting spur from the range on the north side of the valley, just high enough to command good air, and be free from the malaria of the lower valley. It has been said that "proportions more modest might have been chosen;" but the rooms being all on the surface, that is, only one story high, and including a chapel and school-room as well as accommodations for three families, could not very well have been smaller; and when Zeiner Bey afterwards transformed it into a fort, in place of the low rooms built of round stones from the surface and plastered with mud, he erected a structure of substantial stone and lime, two stories high, with round towers at the corners. In this the writer speaks intelligently, for he is the only living Frank who has seen both the original structure and its subsequent transformation. And in thus rectifying the unintentional misrepresentation of a distinguished author and antiquarian, he is very sure that no one will rejoice more than Mr. Layard to see the memory of the good man, of whom he spoke so kindly, vindicated, notwithstanding this misunderstanding of his plans and arrangements.[2]

It only remains to perform the sad duty of stating what agency the Nestorians themselves had in bringing about the massacre. What their character originally was there is at present no means of knowing. It may be that original gentleness and forbearance were transformed by centuries of wrong into the fierceness that characterized them before the massacre. Be that as it may, it cannot be denied that few tribes were more fierce than they. The writer does not remember to have heard one of the common people speak in gentle tones. The harsh gutturals of the Syriac lost nothing of harshness in their mode of utterance. In speaking, they seemed to be trying to drown the roar

[1] p. 324.

[2] See *Nineveh and its Remains*, Vol. 1, pp. 156–157; and also his letter in *Dr. Grant and the Mountain Nestorians*, pp. 403–404.

of the torrent or storm, and their conduct corresponded. The mountain fennel is cut as food for their herds and flocks, and though the quantity is very small, its harvesting was generally a time of fierce contention, involving sometimes whole villages in war; not like the quarrels of the Arabs, an angry war of words, but the dagger in the girdle was ever ready to do the bidding of the excited temper. One killed his relative in a quarrel, and compromised by agreeing to pay the price of blood. Yet, though liable to be slain, according to their *lex talionis*, at any moment, he would not sell a thing under its full value to secure his safety. Even during the short time the writer was in the mountains, Dr. Grant not only had to interfere to prevent bloodshed in sight of our own door, but a man was brought to him horribly mangled, who, to revenge some trespass on his grounds, had attacked a whole Kûrdish village single-handed, and, as the villagers thought, had been killed by their daggers; but his friends brought him a day's journey over the mountain, to the doctor, and, to their surprise, he recovered under his skillful treatment. The summary vengeance that is sure to follow murder, often holds them back from its commission, but not always, as Dr. Grant shows by frequent instances;[1] and when the writer left Ashitha, in 1843, two hours down the valley, in Berwer, he found the charred ruins of a village burned by the very men who were then trembling lest a like fate should befall their own. When Dr. Grant went to see Heiyo, who had the reputation of being the worst man in Tiary, and whom he visited only in the hope of conciliating him for the sake of the patriarch, with whom he was at variance, and of the mission families who were coming to live within his reach, he was invited to call again. On the second visit Heiyo received him in a very surly way; then, drawing his dagger from its sheath and running his fingers along the edge, hinted how easily he could kill and rob him, while his cut-throat followers boasted of their deeds of blood. But his courageous visitor, no way disconcerted, replied: "I am your guest, and you can do with me as you please; but I feel deeply concerned for you and for your people, who are drawing down the wrath of God on themselves for their sins and animosities, and provoking him to deliver them to their enemies." Heiyo pointed with a sneer to the rocks around him. Nevertheless, he felt the appeal, and became reconciled to the patriarch, with whom he had long been at variance. It is no wonder that his name was a terror[2] to all the region around, and not only a terror but an object of intensest hatred, which only needed a favorable opportunity to flame out in vengeance; and that opportunity came at length, when the emir on the east, and Badir Khan Bey on the west, combined with the Turks on the north and south, for the destruction of his people.

The same fierceness that dealt out such destruction to surrounding Kûrds, broke out in bitterness toward one another. Heiyo was only one out of several, all of whom agreed in nothing but in the indulgence of unrestrained self-will, trampling all else under foot in order to gratify their hate. The prevalence of this spirit rendered coöperation impossible. Each sought the indulgence of his own passion, regardless of the interests of the rest, and so they furnished another illustration of the old adage, "United we stand, divided we fall."

[1] *Dr. Grant and the Mountain Nestorians*, p. 139.
[2] See *Missionary Herald*, 1850, p. 89; 1851, p. 56.

Dr. Grant saw the danger, and did his utmost to avert it. Heiyo was by no means the only root of bitterness. There were more besides; and as fast as the good missionary succeeded in inducing one to do right, another fell back into his evil ways. At the same time he earnestly entreated the patriarch to come to terms with the emir; but this involved too much self-abnegation, and Mar Shimon summoned his warriors to the field, only to find that they had learned to disobey him. Even his anathema fell powerless, because it fell on almost all alike. So the patriarch, with his handful of followers, could only sting and madden the enemy, without doing any serious injury. The burning of the bridge at Julamerk, and a foray from Diss, especially provoked their vengeance. Still, though the devoted missionary saw the inevitable end to which all things were tending, he could not bear to abandon the field. To do that would rob life of its sweetness, for his life was identified with theirs.

While he was finishing the house for the occupancy of the missionaries whom his associate had gone to bring in, Badir Khan Bey sent a band to rob the flocks of the malek of Chumba. It was a real Kûrdish chappow. Several lonely shepherds in the distant pastures, men, women, and children, were slain, and four or five thousand sheep driven away. It was in revenge for the malek's steadfast support of the patriarch, and who could punish the bey of Bûhtan? That same night another band attacked the village of Halmon, and killing twelve men and seven women, carried off the last of their flocks.

Mar Shimon now dismissed his followers, and sat alone in Ashitha, nursing his wrath against the emir, as the real aggressor, and against his own people, for their failure to support him. He then turned to the pasha of Mosul for help. But that official was linked in with the Kûrds, and only played with his victim, till the patriarch was roused to reply, "we are not foxes that skulk, but lions that fight."

We woke up one morning in Ashitha, surprised to find five armed Kûrds seated in the room before our beds, sent by the bey of Bûhtan to invite the doctor to make a professional call — perhaps, also, to spy out the land in Tiary. Dr. Grant, hoping to be the means of good to the Nestorians, if not to their enemy, promised to go; and in the month of June fulfilled his promise. Fearlessly he went alone into the lion's den; and was there an eye-witness of the preparations for the invasion, and heard with his own ears the ferocious exhortations of the moollahs, and the unconcealed hatred and fanaticism of the Kûrds, who counted themselves chosen of God to exterminate the infidels. He found it of no use to try to avert the storm, though both the emir and the bey assured him of safety not only for himself and all who might take refuge in his house, but solemnly engaged that the whole valley, as far as Lezan, should be spared for his sake, if they would submit to pay tribute — a promise which, however doubted by Mar Shimon, was sacredly observed to the letter.

Dr. Grant returned in safety, to the surprise of the Nestorians, but not to find his counsels to mutual coöperation any more effectual than before. Malek Berkho now sent for his medical services at Galia Salaberka, and though the patriarch warned him how easily the malek could secure the favor of the Kûrds by his murder, he went, hoping to be the means of promoting peace between the

malek and the patriarch. His disinterested kindness and fearlessness won the heart of the malek, as it had won the hearts of Heiyo and the Kûrdish chiefs; but he did not succeed in healing the divisions of the people. Every man seemed the enemy of every other. The malek told him that if the Kûrds did not destroy Ashitha he would do it himself. Many opposed Mar Shimon because he had assumed a political power unknown to his predecessors, and he in turn was angry because they did nothing for the common safety.

Even while the courageous missionary was ministering to this new patient, the carnage began in Diss, and the fugitives who fled, each alone, from the scene of blood, brought every one his story of massacre. The leading men of the tribe were assassinated at a council to which they had been invited to discuss terms of peace; then the people, left without leaders, were butchered without distinction of age or sex, to the number of eight hundred. The mother of the patriarch, who had shown motherly kindness to the visitor from the new world, was cut down, and as her murderers threw the mangled body into the Zab, it was with the bitter taunt, "Go, carry the news to your accursed son." Her son Zadok, who had often been Dr. Grant's companion in his journeys, and his bright boy, the heir-apparent of the patriarchate, were also among the slain. Three brothers and an only sister were dragged into captivity — the latter was afterwards redeemed by Dr. Grant — and out of forty belonging to the family of the malek only one lived to tell the tale of slaughter. The library of the patriarchate was destroyed, and the district laid waste. Only a small band held a mountain fastness against the foe.

No one in all the mountains suffered more keenly from the blow than Dr. Grant. He rose from a sleepless bed to hear that the main army from Bûhtan was advancing from the northwest, to form a junction with those who had done their work so thoroughly in Diss. Southeast and south were other bands of hostile Kûrds in league with both; while a Turkish host approached from the southwest. As long as he could help the people whom he loved, he had known neither fear nor regard for his own comfort; and had he known that he would never again look on those scenes of his heroic toil, he could not have staid longer or turned away more reluctantly. Much as he heard and suffered afterward, in news of yet greater carnage and in meeting with the remnants of former families of friends, he has since told the writer that nothing equaled the agony of that hour. It seemed as though his heart and hopes were crushed together, and he knew the meaning of that expression, "The bitterness of death is past." He left by the same road that he first entered the mountains, spent the last night with the same aged bishop of Durce who had welcomed him in 1839, and, rising at midnight, he kept a mountain ridge between him and the Turkish army, and reached Mosul in safety July 15, 1843. God would not suffer a hair of his head to be harmed, who had not counted his life dear to him for the sake of the kingdom of Christ, lest those who came after should be deterred from like devotion.

It was not so with the people for whom he had suffered so much. No sooner were the captives from Diss sent to Bûhtan, than the Kûrds under Badir Khan Bey and Khan Mahmûd pushed on from the district of Maidan,

and did not meet with the slightest resistance on the way. As they passed through a defile, where three hundred men could have hemmed in the whole army and slaughtered them at leisure, Ismael Pasha remonstrated against venturing into such a trap; but the gate was left wide open, for the Nestorians had no leader; they who should have planned together planned against each other. The invaders advanced without hindrance to Chumba, where a handful of brave men fought against overwhelming odds till most of them were slain. The malek, on whom the patriarch chiefly relied, was among the first to fall. Mr. Layard thus describes his death:[1] "After performing prodigies of valor in the defence of the pass, he was carried to a secluded cavern, with his thigh broken by a musket ball; and a woman, to save her own life, betrayed his refuge. He was dragged with savage exultation before Badir Khan Bey, and fell down, of course. 'Why does the infidel sit in my presence?' cried the ferocious chief, who knew the cause; 'and what dog is this that has dared to shed the blood of true believers?' 'O Mir,' was the reply of Malek Ismael, partly raising himself, 'this arm has slain nearly twenty Kûrds, and had God spared me, as many more had fallen by it.' Making a sign in silence to his men to bring the victim, he walked to the Zab, and made them hold him over the river while they severed his head from his body and cast them both into the stream." His wife, with many others, was taken captive, while a few escaped across the Zab, and destroyed the bridge behind them. His sister, who stood with her brother, slew four men before she herself fell mortally wounded; and when Mr. Layard visited the place, in 1846, its fields were desolate, its groves cut down, and there was not a roof standing under which he could pass the night.

The Kûrds now passed down the western bank of the Zab, and destroyed the venerated church of Mar Sâwa, as far as they could with gunpowder. This now became the headquarters, whence troops went out to destroy the surrounding villages. The people of each, panic-stricken, seemed to wait passively like prisoners on a scaffold, till it came their turn to pass under the hands of the executioner. They seemed alike incapable of flight or of resistance.

One detachment went up to Serspidho, and most of the men fled to a lofty rock for safety, leaving their wives and children to a horrid butchery. Out of seven men in our room here two years later, we found that six lost their wives that day. The Kûrds then surrounded the rock, and out of two hundred only thirty escaped alive. In a small castle to the south of the village, forty more bravely stemmed the tide till only four remained. The village was leveled; out of twenty deacons only five survived, and one priest became the sole representative of three. Mr. Layard says that out of eighty houses only thirty remained, which involves a loss of five hundred out of a population of eight hundred.

This is only one of many similar scenes in all the region. The delightful valley of Mar Sâwa was left utterly desolate; the houses and mills demolished, the trees cut down, and horses were stabled in the ancient church, which they found it impossible to destroy. It still stands, one of the oldest in the mountains.

[1] *Nineveh and its Remains*, Vol. I, p. 187.

Before this, a mountaineer barely lived on a small piece of arable land, with a few sheep and goats. Now, even the trees were chopped into lengths that made them worthless for the construction of new dwellings; and in such a region one knew not whether to pity more the living or the dead, especially during the severity of winter.

The village of Ashitha was the natural entrance into the mountains from Bûhtan; but while the rest of Tiary was laid waste, this was spared, according to the promise made to Dr. Grant. Badir Khan Bey even restored to him some articles of personal property which he found among the plunder; and Mar Shimon attributed the safety of that valley to the missionary whose goodness had compelled the admiration even of the Kûrds. It was, however, occupied and laid under tribute. Zeiner Bey took possession of the mission house, and at once went to work to transform it into a fort. Lime was substituted for mud, the windows, and all the doors but one were built up, which was made strong enough to resist attack. The walls were raised a story higher, and the towers at the corners commanded the entrance, and also every portion of the walls. No one would have recognized in it the modest structure whose place it occupied. Zeiner Bey and his Kûrds were not easily endured by the fierce men of Tiary, all unused as they were to subjection, and in October they made an attack on the castle, under two leaders. one of whom, Shemasha[1] Hinno, from Lezan, had sided with Badir Khan Bey before the invasion, and the other, Kasha[2] Jindo, from Salaberka, had taken the part of the emir. As the besieged were taken by surprise, they were soon without food or water, and must have surrendered, had not the deacon been allured inside under promise of receiving the property there stored up, on condition the garrison might leave unmolested; but no sooner had he been hoisted up to the roof than Zeiner Bey demanded food and water or his life. The poltroon at once acceded to the demand, and his men were infatuated enough to obey his orders. Relief was also speedily sent by Badir Khan Bey, and the Nestorians were routed with great slaughter. The deacon was impaled in the castle, and the priest was put to death in Julamerk; and now the Kûrds took their revenge on the village which had joined in the attack, and the story of their cruelties will never perish from the traditions of Kûrdistan. Zeiner Bey plundered all there was to plunder, slew such as resisted, and tortured all whom he suspected of concealing food or treasure. Many a poor family lost the store of millet or barley laid up for the winter. In 1844 we saw men who had lost the use of their arms by the twisting of the cords that bound them behind their backs. One man had lost the use of a leg by similar cruelties. The breasts of some were burned with hot irons, and others were suspended by hooks inserted in their flesh. These things were horrid enough, but others cannot be told. The Kûrds now swept down the valley to the Zab. Out of three hundred houses in Ashitha only four were left unburned. Zawitha alone was spared. The people of Minyanish and Lezan, even the women and children, climbed to an almost inaccessible recess in the cliff, and the Kûrds, not daring to follow, cut off their supplies. After starving for three days, they offered to surrender. Zeiner

[1] Deacon. [2] Priest.

Bey swore on the Koran to spare their lives if they gave up their arms; no sooner was this done than the slaughter began, till, tired of the task, and knee-deep in blood and slippery bodies, the Kûrds forced out the rest to fall a mangled mass on the rocks below. Out of at least one thousand, hardly one — one report says only one — escaped. The foray into Berawola prevented our visiting the place in 1844, but Mr. Layard thus describes it in 1846:

"We toiled more than an hour up almost perpendicular *detritus*, crowned a thousand feet above by a wall of lofty rocks. Sometimes we clung to small shrubs, whose roots scarcely reached down to the scanty soil; at others we crawled on hands and knees, crossing gullies, or carried down by the stones we had set in motion. We soon saw traces of the slaughter. At first, a solitary skull rolled down with the stones; then heaps of blanched bones; farther on, fragments of rotting garments. As we advanced the remains became more frequent. Skeletons, almost entire, were still entangled in the dwarf shrubs. Near the foot of the cliff the surface became covered with bones, mingled with long plaited braids of hair, shreds of discolored linen, and well-worn shoes. There were skulls of all ages, from the infant to the toothless old man. We could not avoid treading on them, and hesitated. 'This is nothing,' cried the guide. 'Follow me; these are only those who were thrown from above.' He sprang on a ledge running along the precipice above us, and clambered along its face, with the Zab scarcely visible far below. I followed till the ledge was scarcely wider than my hand, and when it disappeared for three or four feet together, I was compelled to return, on account of lameness, after catching a glimpse of an open platform, or recess, covered with human remains."[1]

This was the last great slaughter during the life of Dr. Grant, though murders and robberies on a small scale never ceased. Less than a year before our visit in 1844, the men under Zeiner Bey amused themselves by throwing up infants and catching them as they fell on the point of their daggers; and the lives of the people were in constant danger from those who deemed it meritorious to shed Christian blood. The day before we arrived at Ashitha, in August, 1844, one man was killed in Lezan. A few days after, another was killed and a third wounded. Fifty sheep were taken from Matha d' Kasra; and two days before we left the mountains, three hundred men were sent by the emir to take one hundred and fifty sheep from Berawola — the only flock of any size left in Tiary; and when we entered the village, women were wailing for the dead. The Kûrds had attacked them in the night, killed the shepherd, and were driving off their booty, when the villagers assailed them and killed three, losing two of their own number. The bodies of the three invaders lay stark and stiff on the hillside. The rest fled, carrying off their wounded. The villages of Berawola were deserted. In one house the cradle was left, and a dog howled at us as we passed. The wind swept moaning by as we descended near dusk from the bleak ridge of the mountain. In a lower village, a sick priest, unable to flee with the rest, had been killed. Everywhere men were fleeing, but knew not where to flee. After nine o'clock our way led through families sleeping in the path, and from the bottom of the glen, in the moonlight, we could see files of men creeping along the ledges above us till we stopped at midnight.

[1] *Nineveh and its Remains*, Vol. I, pp. 164, 165.

And yet Berawola suffered less than other villages during the invasion, though fifty prisoners were butchered here, and a rude monument now marks the spot.

As the men of Tehoma sided with the emir, and even joined with him in his attack on Tiary, they were spared for a time; and when Mr. Layard passed through that district, in September, 1846, he found the people sitting under their own vine and fig tree, but with much to molest and make them afraid, for even then Badir Khan Bey was on the march. The women were burying their ornaments, the priests hiding the manuscripts and holy vessels of their churches, and shortly after Mr. Layard's return to Mosul he heard that a feeble resistance was followed by an indiscriminate massacre. The bey had sworn that there should be no more interference from Christian powers, or ransoming of captives, and so the women were brought before him and murdered in cold blood. Nearly half the population, which, according to Mr. Layard, would be about fifteen hundred souls, fell victims to his fury;[1] among them one of the maleks, and Kasha[2] Bodaca. Three hundred women and children, who were fleeing over the desolate mountain pass into Bass, were overtaken and killed in that savage solitude. The houses and gardens were destroyed, and the churches pulled down. Even when the fugitives ventured to return, they were attacked by the emir, and many died under the tortures inflicted to compel them to reveal their buried treasures, though in many cases they had none to reveal. Mr. Layard thought that from four villages alone, seven hundred and seventy perished. Mr. Cochran estimated the population in 1850 at nearly five thousand, as Dr. Perkins had done in 1849.[3]

It is difficult to determine the whole number that perished in the mountains. When we passed through, in 1844, there were only four houses standing in Ashitha, and not one hundred in all Tiary. Outside Ashitha the ruins were as six to one, and in Diss even more than that. The total losses, up to 1844, Dr. Smith estimated at ten thousand, and the massacre in Tehoma must be added to that.

The high alpine district of Bass, having been long tributary to Nûrûllah Bey, did not share in the desolation of the rest. Its five villages remained unharmed. The six villages of Tall were tributary to the same chief, who had also some authority over the fifteen villages of Jelu; one of them, Alson, containing one hundred houses;[4] Zeer fifty or sixty;[5] and in Mar Zeiya, Yonan, and Khamis, two Nestorians from Oroomiah preached to a congregation of two thousand, though these were assembled from all the region at an annual festival.[6]

The fact that the severity of the blow fell on only a part of the Mountain Nestorians only shows how much more terrible the stroke was where it fell.

THE EXPULSION OF THE CHEROKEES.

The history of combined Turkish and Kûrdish oppression, as recorded by our missionaries, is full of sadness; but it rouses the indignation of every good man to read the missionary record of American oppression on our own terri-

[1] *Nineveh and its Remains*, Vol. I, pp. 174–175.
[2] Priest.
[3] *Missionary Herald*, 1851, p. 58.
[4] *Dr. Grant and the Mountain Nestorians*, p. 241.
[5] *Missionary Herald*, 1851, p. 93.
[6] Do., 1851, p. 93.

tory. For Turks and Kûrds only acted out the teachings of the Koran, which they receive as the word of God; but Americans have contradicted every precept of the Gospel in their treatment of our Indian tribes. We do not forget that there are honorable exceptions. Nor is the fact lost sight of that many of the most flagrant wrongs done to the Indian have been perpetrated in the face of the energetic protests of good men, who did their utmost to resist, though they could not prevent them. The whole story is too long for recital in this volume, though the American Board has been called to witness most of what has taken place during the present century. Indeed, the crimes have not yet all become things of the past, as the wrongs endured by the Poncas at this moment testify; but the expulsion of the Cherokees is selected as a specimen of all these wrongs, both because it is so marked, and because both the missionaries and officers of the American Board had so much to do with efforts to avert it.[1]

The country of the Cherokees included the southeastern section of the State of Tennessee, the northern portions of Alabama and Georgia, the northwestern part of South Carolina, and the western extremity of North Carolina. This country was theirs from time immemorial. Neither history nor tradition go back to a period when it was not theirs. From the first settlement of the English in their vicinity, their title to these lands was acknowledged; and whenever a part was sold, boundaries were established between it and that which they retained, and in the settlement of these boundaries they always had a voice. In the year 1785 the treaty of Hopewell was made with them, by the then confederated States. In this a definite boundary was established, leaving them under their own government, and implicitly reserving to them every right not expressly surrendered. Then, when the federal constitution was adopted, this treaty became the supreme law of the land. In 1791 the United States entered into a treaty with them, expressly and solemnly guaranteeing to them all of their lands not then ceded to the United States. Thirteen treaties were made between the same parties from that date till the year 1819. In them this guaranty was always implied. It was expressly repeated in the one for 1798, and declared to be *forever*. In these treaties they placed themselves under the protection of the United States, granted the free navigation of their rivers, and the opening of certain specified roads through their territory, ceded large tracts of land, and engaged not to form compacts with separate States, or with individuals; and the United States, on their part, gave a perpetual guaranty of all lands not ceded, covenants of perpetual peace and good neighborhood, various annuities, and help in the work of their civilization. The laws of the United States were conformed to these treaties. White intruders into their territories were subjected to severe penalties. They were even repeatedly expelled by our armies. And the intercourse laws described their territory as *not within the jurisdiction of the United States*. Indeed, it was universally understood that the only way to acquire possession of any of their lands was through treaties between them and our republic. These were ratified with the same solemnity

[1] The following statements are based on Dr. J. Tracy's *History of the A. B. C. F. M.*, and *The Life of Jeremiah Evarts*, by Rev. E. C. Tracy; and many of them are in the language of Mr. Evarts.

as treaties with European powers. The great principles to be observed in negotiating with the Indians received the sanction of the senate before being incorporated in them, and among these was an inviolable guaranty to their lands, and in selling them the free consent of the Indians to terms fairly proposed and fully understood. Of course, whatever was thus deliberately and solemnly made binding on the United States was also binding on every State that belonged to the union. Moreover, the whole power of the United States was pledged for their defense, even against those who had never consented to these treaties and laws.

Up to the adoption of the constitution Georgia had made numerous treaties with the Indians; but no one of them ever intimated the right to dispossess them beyond the boundary of their territory. Of course, when Georgia entered the union as one of the original thirteen States, in 1788, she admitted the treaty of Hopewell to be the supreme law of the land, and engaged to observe all future treaties as equally authoritative. Nor that only, but the compact between Georgia and the United States, in 1802, which her legislature declared to be binding on all her citizens forever, debars her from extinguishing an Indian title, except as a consequence of treaties negotiated by the United States with the Indians. And it is on record that, up to 1826, she repeatedly urged the general government to purchase Indian lands for her by treaty. Nor did she intimate any possibility of acquiring them in any other way. It was thus that she acquired fifteen million of acres from the Creeks and Cherokees, and they are described in her statute-books as acquired for her by the United States through treaties with these nations; and her governors up to 1825 issued their proclamations declaring these treaties to be the supreme law of the land. Is it said these are not *bona fide* treaties? They have all the attributes of treaties. The word has always been applied to them, and the treaty-making power alone can decide what is or is not a treaty, and having decided that a certain compact is a treaty, there is no power known to the constitution that can declare that it is not so. The treaties with the Cherokees were negotiated under the first five presidents of the United States, and ratified by every senate for thirty years. Appropriations to carry them out were also made by every house of representatives. By them, at a critical period of our national history, we were saved from a protracted Indian war, and our frontiers protected from the horrors of Indian invasion. Also by them we acquired large tracts of valuable land, which now sustain a population of hundreds of thousands; while the Cherokees retained but a small part of their original domain, and that the least valuable.

To violate such engagements, then, while the Cherokees were living in amity with us, and giving no ground of complaint, was a frightful compound of perfidy and wrong; a breach of plighted faith unparalleled in history, and yet precisely this was the course pursued by the State of Georgia.

The increase of the white population near the Cherokee border led to efforts to acquire more Indian lands; at the same time the rapid civilization of the Cherokees led to the apprehension that it would soon be impossible to purchase any more; hence, from 1820 to 1827, efforts were constantly made to

obtain all the remaining Indian lands within the State. The lands of the Creek Indians were secured by a process of fraud, bribery, and unmanly threats, that reflected no honor on its authors. But the Cherokees positively refused to sell another foot of land, and in December, 1827, the legislature of Georgia resorted to a new mode of warfare. They proclaimed that the Cherokees had no title to their territory; that they were mere tenants at will; and that Georgia might take possession whenever she pleased. A long report, embodying such assumptions, was adopted by both branches of the legislature, and the governor did not scruple to approve and communicate it officially to the president of the United States. No material action was taken during the last year of Mr. Adams' administration, but on the 18th of April, 1829, the secretary of war addressed a letter to the Cherokee deputation, announcing that all Indians within the boundaries of a State were subject to that State, and the president had no power to protect them. This announcement, so contradictory to all previous history, and to the treaties in their hands bearing the seal of the United States, fell on the Cherokees like a thunderbolt. They appealed to congress for protection from the outrage; for in December, 1828, the legislature of Georgia had passed an act to extend the laws of Georgia over the Cherokees residing within its limits, to take effect from June 1, 1830. No such course had been pursued in the country before; nor had any State, up to this moment, claimed the right of driving peaceable Indians from their possessions in order to divide them among its own people. But even that does not measure the depth of the infamy to which Georgia descended.

The report of the joint committee of the legislature, approved by the senate December 27, 1827, affirms that European nations "asserted successfully the right of occupying such parts" of America "as each discovered, and thereby established their supreme command over it." To use its own language: "It may be contended that in these claims is more of *force* than *justice;* but they have been admitted by the whole civilized world, and it is unquestionably true that, under such circumstances, *force* becomes *right.*"

Again: "It may be contended that by the compact of 1802 a consideration was to be paid by the United States to the Indians for their relinquishment of this title, and therefore it was entitled to respect, and could not be taken from them unless by their consent; but we are of a different opinion."

Again: "Before the compact of 1802 Georgia could rightfully have taken those lands, either by *negotiation* or by *force*, and had determined in one of the two ways to do so; and by this contract she made it the duty of the United States to meet the cost of obtaining them, provided it could be done by negotiation; but, in case force was needed, by making no provision for that, Georgia is left at full liberty to prosecute her rights according to her own discretion, as though no such contract had been made."

Again: The committee asserted "that the right of soil and sovereignty was perfect in Great Britain; that the possession of the Indians was permissive; that their title was temporary; that they were mere tenants at will; and that it might be determined at any moment, either by negotiation or by force."

These are their own words, stripped in a few places of superfluous verbiage, and the italics are their own.

Jeremiah Evarts, Esq., then secretary of the American Board, and father of our late secretary of state, says of these extracts: "It is hard to tell which is most remarkable, their reasoning or their morality."[1] One specimen of their logic is, that as the compact of 1802 does not bind the United States to use force against the Indians, therefore, Georgia has the right to use it whenever she pleases. Another is, that as the Cherokees were to receive a consideration for their lands, therefore they must have a title that should command respect, and therefore the committee comes to the opposite conclusion.

The morality of the document appears in the broad position that discovery gave absolute title to Europeans, making the title of the real owners no title at all; and that as all Europeans agree in the principle that the discoverer may terminate the occupation of the owners at any moment, by force or otherwise, therefore *force becomes right.* It is to be inferred, then, that Cortes and Pizarro did perfectly right to seize on the possessions which the king of Spain thus held in Mexico and Peru, though to do this involved the unpleasant necessity of murdering the original inhabitants.

Mr. Evarts goes on to say: The committee are entirely mistaken when they say that "every foot of land in the United States is held" by such a title. On the contrary, there is not within the bounds of the United States, as fixed by the peace of 1783, a single foot of land held as against the original inhabitants, by the title of discovery alone. The largest part of it has been purchased of them, and only a small part has been conquered. But even in this last case, war has not been waged merely to enforce the title of discovery. The politicians of Georgia are challenged to produce a single instance in our Anglo-American colonies where an English king, or colonial governor, or any legislature whatsoever, previous to 1825, took forcible possession of an Indian country by the right of discovery, without regard to what our supreme court calls "the just and legal claim" of the natives to retain their lands. The exclusive *right of extinguishing the Indian title* is something totally different from the right of discovery. But even if all the governments of Europe had for three centuries held this doctrine of Georgia, no defense could make it otherwise than atrocious and detestable. Not all the power and sophistry on earth could make it entitled to the least respect. What is this doctrine so necessary to Georgia? It is that an English vessel sailing along the American coast gives the king of England an absolute title not to the coast only, but to the whole interior, so that he may commission any of his subjects to destroy the original inhabitants and take forcible possession. For more than two hundred years the powers of Europe legalized the slave trade, and the judicial tribunals of all countries sustained it; but did that make it right? It is now piracy, and to be connected with it is infamy; and in its intrinsic nature it never was otherwise.

Is it said that this puts the case too strongly? Read the law approved December 20, 1828, to extend the jurisdiction of Georgia over the Cherokees.

Section nine reads thus: "That no Indian, or descendant of Indians, resid-

[1] The remarks which follow are so much condensed from the original argument that it would hardly be fair to Mr. Evarts to use quotation marks.

ing within the Creek or Cherokee nations of Indians, shall be deemed a competent witness, or a party to any suit in any court created by the constitution or laws of this State, to which a white man may be a party."

Under this law, a white man might rob or murder a Cherokee, in the presence of his whole nation, and yet the offense could not be proved; and the abuses and vexations growing out of such a law would render Indian life intolerable. The plan of Georgia, as expounded by her senate, was to seize five sixths of the Cherokee land, and distribute it among her citizens. If an Indian remained, he had no rights; his own land was a boon that might be taken from him at any moment. His neighbors were not orderly citizens, but the idle, drunken, and quarrelsome, who hated Indians, and seized every opportunity to abuse them. If his cattle were driven away before his eyes; if his fences were thrown down, and his crops destroyed; if his children were beaten, or his wife outraged, he could not even seek the protection of law. He could neither be party nor witness. Even the slaves had friends in their masters, but he had none. He was a friendless outcast in his own home, and that through no fault of his. He was a vagabond on the land he had subdued from the forest; an outlaw in his own house which he had builded; an alien in his native land, made so by men whom he had welcomed with hospitality and treated with kindness.

Who were these thus abused? Nude Hottentots skulking through the forests? runaway slaves? malefactors whose hands are reeking with blood? Even if Hottentots, they should be treated kindly. If ruffians, they should be tried before the courts in a regular way. The innocent should not suffer with the guilty, nor even the guilty be punished without a trial. But these were neither savages nor criminals. Their only crime was that they owned lands which their neighbors coveted. They were peaceful farmers; better clothed and housed, through their own exertions, than many of the peasantry of Europe. They were men who had held diplomatic relations with our country from the first; who had not broken the peace by an act of hostility for forty years; who had done nothing to forfeit the guaranties assured to them in treaties over and over again; men who, in raising themselves up, under missionary instruction, to a high state of civilization, had a right to the aid and sympathy of all the good; who had a regularly organized government of their own, with legislative, judicial, and executive departments; a majority of whom could read their own language, and many of them ours in addition; whose public documents need not shun comparison with those emanating from our own highest functionaries; above all — "fellow-citizens with the saints, and of the household of God," through the labors of American missionaries. These were the men whom the State of Georgia treated as worse than felons. These were the men not even allowed to live under law, but made outlaws in the land of their fathers.

And who were they who inflicted this wrong? Was it an Asiatic despotism, sinking under the crimes of the past and the corruption of the present? No. It was a government that sprung into being declaring that "all men are created equal. That they are endowed by their Creator with certain inalienable rights, and that among these are life, liberty, and the pursuit of happiness."

These burning words were only a few of those penned by Mr. Evarts, in his

eloquent appeals to government, and to the people of the United States. He wrote memorials to congress. He published essays in leading periodicals. He issued them in pamphlet form. He aided the Cherokees to give utterance to their deep sense of cruel wrong. He edited a volume of speeches on the subject in congress by such men as Theodore Frelinghuysen, Edward Everett, and others. There was nothing in his power that he did not do, and do well; but it was all in vain. President Jackson took ground against the Indians, and his followers made it a party measure. They could neither hear truth or do justice, they could only sustain the party; so the government of the United States sided with Georgia, and shared in the guilt of her inexcusable oppression. May 26, 1829, the house passed the Indian bill, by a strict party vote, and two hours later the senate concurred in the amendments, and the bill was ready for the signature of President Jackson.

The toils and anxieties of Mr. Evarts, in connection with the effort to prevent this public injustice, doubtless hastened his death; but after that the great wrong still went on.

And here let us go back a little, that our understanding of the case may be more intelligent. Allusion has been made to the compact of the United States with Georgia, in 1802, and the reader may have queried how the general government could form a compact with a State already a part of itself. It was in this way: The State of Georgia had claimed all the territory between its own western border and the Mississippi, and, after selling large portions of it to individuals, had repealed the law under which the sales were made, destroyed the public records relating to it, and declared all the titles it had given, and for which it had been paid, null and void. We do not stop to comment on the morality of this, though the State that could thus defraud its own citizens and others could not be expected to deal justly with the Indians within its borders. The defrauded whites, however, had a standing in the courts; and the supreme court of the United States decided, as in duty bound, that Georgia could not, by the trick of repealing her own law, deprive men of lands which they had legally bought and paid for. To procure means to meet the claims made by this decision, Georgia ceded to the United States her title to that territory, and the United States agreed to pay one and a quarter millions of dollars from the first net proceeds of its sale, and also to extinguish, for the use of Georgia, as soon as it could be done peaceably and on reasonable terms, the Indian title to all lands within that State. This was the famous compact of 1802; and in fulfillment of it the United States bought the more valuable lands of the Cherokees, leaving the rest in their possession. Meanwhile, from a tribe of hunters, they had become a nation of farmers, and refused to sell any more land; they even enacted a law to put to death any chief who should attempt it, and we shall see hereafter how this law was carried out to the letter. The population of the State at this time was only seven to the square mile; yet money could be made by trading in these lands, and it was proposed to take possession of them, and distribute them in small lots among her citizens by *lottery*, thus appealing to the avarice of every voter, though one wonders that their sense of justice could allow avarice to reveal itself so shamelessly. The politicians favored the meas-

ure in order to secure election, and the State charged the general government with bad faith in not having removed the Indians. The reëlection of Mr. Adams was opposed on the ground that he had not done this, and General Jackson gave the measure his decided support. Then the State law of December 20, 1828, was passed, to extend jurisdiction over the Cherokees after June 1, 1830, in the manner already stated. Against this the Cherokees remonstrated to the president, but he replied that he could not interfere. Encouraged by this, Alabama and Mississippi enacted similar laws, with the avowed object of making the condition of the Indians so intolerable that they would be compelled to leave.

At this time the American Board "Resolved, that from the peculiar relation in which these unoffending and defenceless Indians stand to this Board, we feel it to be our indispensable duty, at this crisis of their destiny, to express our sympathy in their distressed condition, and also our deep sense of the solemnity of the obligations which treaties, superadded to the claims of natural justice, have imposed on the government of our country in their behalf; and we earnestly implore the blessing of Almighty God to enlighten, and to guide, the deliberations of the constituted authorities of our country, so as to secure the just rights of the Indians, and preserve the faith and honor of the government." The prudential committee also memorialized congress on the effect such proceedings would have on the religious improvement of the Indians.

But the people of Georgia were determined to have the land, and to secure this they first sought to get rid of the missionaries who stood in the way. So they enacted a law that "all white men residing on the Cherokee lands in Georgia, after the first day of March next ensuing, without taking an oath of allegiance to the State, and obtaining a license from the governor, should be considered guilty of a high misdemeanor; and on conviction be imprisoned in the penitentiary at hard labor for not less than four years." Copies of this law were sent to all the missionaries in January, but they went on with their labors as usual. In March, a colonel of the Georgia Guard, with twenty-five men, without warrant from any court, took Mr. Isaac Proctor, Rev. S. A. Worcester, and Rev. John Thompson, prisoners, and removed them to Camp Gilmer. The two last were taken on a writ of *habeas corpus* before the superior court, where able counsel moved for their release on the ground that the law was unconstitutional. Judge Clayton, however, overruled the motion, but released them on the ground that Mr. Worcester was postmaster, and all of them were expending United States funds for the civilization of the Indians. Dr. Elizur Butler was also arrested in May, but released on his promise to appear at the camp.

The governor now wrote to the secretary of war to know whether the government considered the missionaries its agents; and though he did not receive a direct reply, he wrote to the missionaries that sufficient evidence had been obtained to decide that they were not the agents of government, and required them to leave the country "with as little delay as possible," under penalty of another arrest; but they replied that they could not in conscience obey the mandate.

June 22, Col. Nelson, with a detachment of the Guard, came to the house of Mr. Thompson, and claimed house, land, and crops, as the property of Georgia. Mr. Thompson replied, in writing, that they could not occupy it with his consent. He was at once arrested, and driven fifty miles through forests and swamps, to Camp Gilmer. Though sick, and in pain, he was not allowed to ride his own horse, but compelled to walk till he broke down, and a part of the time he was chained. After he had been a few minutes in jail, the commander of the Guard summoned him to his presence, reproved him, denounced the missionaries, and then dismissed him, assigning no reason either for his arrest or dismission, nor making any provision for his return.

July 7 Mr. Worcester was again arrested, taken by military force ten miles, to a place where a Methodist missionary and a Cherokee were also under guard, and from thence he was made to walk twenty-two miles. Another Methodist minister, whom they met, was arrested and made to walk with the rest, while the sergeant in charge reviled ministers and missionaries in the most profane and scurrilous language. Then at night the prisoners were chained together in pairs, by the ankles. They were now joined by Dr. Butler, who was brought there in fetters, one end of the chain fastened round the neck of a horse and the other round his own. Going at night through the forest in this condition he was liable to fall and be strangled by his bonds. That night he was chained by the ankle to his bedstead, and next day walked and rode alternately thirty-five miles with the same kind of fastening to the horse as before. Two more days of journeying in this style ended in the jail at Camp Gilmer. This had neither chair, bench, or table, and no one was allowed to converse with them, or to receive any writing from them till it had been inspected by Col. Nelson. After eleven days they were released on a writ of *habeas corpus*, though while they were before the court Commander Sanford received a letter from the governor, directing him to re-arrest them should they be discharged. In August the infant daughter of Mr. Worcester died, and when he went to visit his family he was decoyed to the door by one of the Guard in disguise, and re-arrested; but Col. Nelson, on learning the circumstances, could not for very shame detain him.

In September they were tried for residing in the country of the Cherokees without taking the oath of allegiance to Georgia. The jury brought in a verdict of guilty, and Judge Clayton sentenced them to hard labor in the penitentiary for four years. On their arrival at Milledgeville, Governor Gilmer directed the inspectors of the penitentiary to try each of them to see if they would accept a pardon and promise to leave the State. This showed that the object of the governor was simply to get them out of the way, so that the Cherokees might be oppressed without interference from the missionaries. But they made up their minds they would neither accept pardon when innocent of crime, nor would they leave the few sheep in the wilderness to the wolves; and so they entered the prison, though some of their fellow-convicts gave the required promise and were at once released. But it was not in the power of the governor to make them regarded as felons. Even the prison keepers, though obliged to obey their superiors, treated them with kindness and respect, and their fel-

low-prisoners did the same. When any unpleasant work was to be done, some of the rest begged the privilege of doing it in their stead. Still, they performed their full share of labor, and refused every indulgence that would distinguish them invidiously from the other prisoners. Some of these, indeed, through the labors of the missionaries, gave evidence of having become true disciples of the Lord Jesus. Many of the Cherokees wrote to the missionaries, sent them money, and contributed to their comfort in every possible way. Ecclesiastical bodies passed resolutions approving their course, and "prayer was made without ceasing of the Church unto God for them."

As the mission had been established with the express sanction and coöperation of the president of the United States, the prudential committee addressed a memorial to the executive, narrating these unlawful deeds, asking protection for the missionaries and mission property, and requesting that the attorney-general be directed to commence a suit in the supreme court against the offenders. The president replied to this, as he had done to the Cherokees, that as Georgia had extended her laws over the Cherokee country, the laws of congress became inoperative, and he had no authority.

The case was brought by a writ of error before the supreme court of the United States, and argued by William Wirt and John Sargent. Chief Justice Marshall decided in favor of the missionaries, declaring the laws of Georgia, extending her jurisdiction over the Cherokee country, repugnant to the constitution, treaties, and laws of the United States, and therefore null and void. The mandate of the court was issued, reversing the judgment of the superior court of Georgia, and ordering that all proceedings on the indictment against the missionaries "do forever surcease." Friends in that court moved that this mandate of the supreme court be received and recorded, and the prisoners discharged; but the court refused, and to prevent a record of the refusal being carried up to the supreme court, refused even to allow its decision to be recorded. But the affidavit of Mr. Chester, certified by the judge, was sworn before him and sent. The governor also, to whom Mr. Chester applied by letter to discharge the prisoners, refused to answer in writing. To such pitiful shifts were the leaders in this crime reduced in carrying out their purpose. A law of Georgia now forbade the continuance of the Cherokee government. An armed force prevented the meeting of the national council, and the land was divided into one-hundred-and-forty-acre lots, to be distributed by lottery. White men crowded into the country to take possession of unoccupied lots, even before the lottery was drawn. Whiskey was brought in with them. Many of the disheartened Indians fell before the temptation, and some five hundred emigrated to the West.

About this time the doctrine of the right of a State to "nullify" a law of the United States within its limits prevailed in South Carolina. A legislative convention in that State forbade the revenue laws of the United States to be enforced, and threatened that the State would withdraw from the union if the general government should attempt to enforce them; and the State made preparations to sustain this movement by force of arms. If now the missionaries pressed their suit, it was feared that Georgia would join the "nullifiers," and that Ala-

bama and Mississippi would do the same. As things were, should the president sustain the supreme court, all those States would unite in opposition. Should he, on the other hand, allow Georgia to carry her point, that would strengthen South Carolina. So, to prevent the missionaries pressing their suit, the governor sent men to intimate to them that if they would withdraw it they would be discharged unconditionally. Another agent of the governor gave the same assurance "unofficially" to Mr. Wirt.

It was certain that even if President Jackson released the missionaries he would not protect the Cherokees. So, to save their country from the prospect of a civil war, the missionaries concluded, after consulting with their friends, not to press their suit, and in their letter to the governor informing him of the fact, they added: "We beg leave respectfully to state to your excellency that we have not been led to this by any change of views, or by any doubt of the justice of our cause, or of our perfect right to a legal discharge in accordance with the decision of the supreme court; but by the apprehension that to go further, under existing circumstances, might be attended with consequences injurious to our beloved country." This the governor deemed disrespectful to the State authorities, and wished them to disclaim any disrespectful intention! They consented also to that, and were accordingly released; though without any written discharge, but by a proclamation, stating that they had appealed to the magnanimity of the State, and been set at liberty—after having been in prison for the crime of preaching the Gospel to the Cherokees without a permit from the governor of Georgia, from September 22, 1831, till January 14, 1833!

Though foiled in their attempt to drive away the missionaries, the authorities of Georgia continued the work of driving away the Cherokees. Partly by force and partly by fraud, Dr. Butler was driven from Haweis, and the mission premises at New Echota were seized by the State, for a claimant under the lottery. In 1835, many of the Cherokees, wearied out by the oppression of Georgia, removed into those parts of their territory that lay in North Carolina and Tennessee, and a small party in the nation, under the lead of the Ridge family and Elias Boudinot, were in favor of ceding their lands and going West; but the great body of the nation stood firm in their determination to remain. In 1837, so many Georgians crowded in around Carmel that that station had to be given up, and also the station at Creek Path, for the same reason, though the people clung to Brainerd, or Chickamauga, the oldest of the stations, and could not be driven from it by any means. In 1838, the United States chose to call the agreement they had made with the Ridge party, in 1835, a treaty with the nation, though it was distinctly repudiated by them at the time, despite all the efforts of Rev. J. F. Schermerhorn to induce them to adopt it. Their delegation at Washington protested against it, but in vain. It was the old story; "in the hand of their oppressors there was power," and the weak were driven to the wall. They had always declared that they would never leave their country under that pretence of a treaty, except by the use of force, and during the early part of 1838 some thousands of United States troops were sent into their country. Even then they continued their preparations for the summer crops; but in the spring Gen. Winfield Scott was sent to expel them, and it is due to

him to state that probably it could not have been done more gently; still it was force, inexorable, irresistible force. More than four thousand of their adult males — there were about sixteen thousand of the nation, men, women, and children — had signed petitions pleading with congress that the solemn engagements entered into by their fathers and ours might be kept. For months their delegation waited at the doors of the capital, and the people at home had hoped against hope that still this great nation would do them justice; but by the end of June the whole nation was gathered into camps, and the journey of more than six hundred miles, occupying four or five months, began. When emigrants leave their native land the young and enterprising go, the aged and infirm remain behind. Here all ages and all conditions were compelled to go. Even those already in their last sickness were driven from their comfortable homes to the exposures of the journey. Emigration in the most favorable circumstances is attended with much loss of life. Is it strange, then, that in this enforced departure of a nation from homes to which they were strongly attached, FOUR THOUSAND OUT OF SIXTEEN THOUSAND sank under their privations. Their sufferings were greatly aggravated by the conduct of Georgians, who rushed into the vacant places, seized property as soon as the Indians were arrested, and sold it to each other for a mere song, before the eyes of its lawful owner. The rich were thus reduced to poverty, and families deprived of many needed comforts during their long journey through the wilderness.

If greater light increases guilt, the decisions of the great day may not in all things endorse the popular estimate of the comparative guilt of the slaughter of ten thousand Nestorians by fanatical Kûrds, and the wrongs inflicted by a Christian people that destroyed four thousand Cherokees — one fourth of the population on whom those wrongs were inflicted. Even after the whole nation were removed to the Indian Territory, the sense of injury was so deep that unknown hands slew the chiefs of the small party with whom the so-called treaty was formed, under cover of the law already referred to; nor could the utmost efforts of the United States detect the guilty perpetrators. The punishment of the greater wrong of the United States, in their dealings with the Cherokees, is reserved for Him whose words are: "Vengeance is mine, I will repay, saith the Lord." And there is no respect of persons with Him. Had Thomas Jefferson lived to see this new triumph of might over right, he had found additional cause for saying, "I tremble for my country when I remember that God is just."

XVII.

EDUCATION.

In the lands where they labor, our missionaries seldom find schools. Generally there are none. In some places, where the spirit of trade leads men to qualify themselves to make commerce more remunerative, there are a few; but, even then, the masses prefer the pleasure of the moment to mental cultivation. And though some master spirits see the need of education in order to human well-being, and urge it forward on that ground, the schools that prosper under their zealous administration collapse when the propelling power is gone, and the people are left to themselves.

In Papal lands, a class, zealous for its own prerogatives, urges education in its own interest on an unwilling people, who sometimes are all the more unwilling when they see how it favors a class at the expense of the masses.

In our own land zeal for the public good, and dread of falling under the power of bad men, maintain popular interest in our public schools.

The truest, and therefore the most efficient and abiding interest in education, is that which, appreciating the value of the Gospel, and desiring to perpetuate its benefits, consecrates the college *Christo et Ecclesiæ*, to raise up men qualified to grasp its truths, and set them forth with power. Not that the power lies wholly in better knowledge of the truth, but in better knowledge of the truth viewed as the divine instrument through which the spirit works in human hearts; and this interest, enlarged to take in the vast extent of the kingdom of our Lord, is the foundation on which missionary education rises in its fair proportions.

Then, when heathen peoples feel the quickening power of the Gospel, over and above the new secular life that demands better clothing, better homes, and a higher plane of earthly comfort, is the love of Christ prompting not only to make provision for their own future edification, but for the extension of the same blessings to their neighbors, and the perpetuation of them to their children after them.

This is the foundation on which Protestant missionary schools are built up, and this is the divine power working in men's hearts to maintain them in the future.

Let us view this principle in its workings among different races, and in lands far apart.

A territory bounded by the British dominions on the north, the Mississippi on the east, the Union Pacific Railroad on the south, and the Rocky Mountains on the west, needed a higher institution of learning. In 1870 the Santee Agency, on the Missouri River, in northeastern Nebraska, was selected as the location, and the summer saw two goodly buildings erected there, one for the school and chapel, and the other the mission-house. A dozen young men applied for admission, and the old log church was floored and turned into a dormitory, convenient for ten or twelve, though sometimes filled with double these numbers. This was the first young men's hall. In 1877 a new hall was begun and partly finished. In the winter of 1877–1878 it held twenty-five, and two young men with their wives occupied the old hall. In the year ending June 30, 1879, it had twenty young men, besides a normal class of three. Pupils have come from five different tribes, and the school is unequaled by any other in all the region. The Presbyterian mission sends its advanced pupils here. Already some of the former pupils are pastors, teachers, or government clerks, while others are at the head of intelligent and Christian homes. Though belonging to a dependent and helpless race, they have developed a good degree of self-reliance. A number of the pupils have earned their clothing by trapping. One, fourteen years of age, wore the price of three hundred muskrats to school; another walked one hundred and thirty miles, and a third rode twice that distance, to enjoy its privileges. All work for the clothing they receive, and young braves, not long before strutting about in paint and feathers, put on aprons and do their share in domestic work.

In 1872, the Woman's Board of Missions began its Dakota Home. It was occupied near the end of 1873. The first class of six young misses, finding it was not a hotel, where they could have a good time, donned their blankets and left. We little know how much we are indebted for our habits of order and industry to the discipline of Christian homes. Success, however, crowned the plan of taking them at an earlier age. The Home was enlarged in 1877, by a laundry. Twenty-six pupils fill the Home, but it had thirty-two in 1877–1878, and twenty-nine in 1879–1880. Except the youngest, the girls do all their own cooking, sewing, and washing, and do it well. Once they were allowed to clean the school-house, so as to have something to give for missions. Those who could not scrub carried water for those who did, and all enjoyed it much.

The Dakota language is used in the school. The studies pursued are arithmetic, algebra, reading in Dakota and English, geography, geometry, grammar, the Bible, United States history, and music, both vocal and instrumental.

The whole plan involves something of the academy, normal school, and theological seminary.[1] Besides the boarders in the Young Men's Hall and Dakota Home, others live at their own homes. In 1877, there were forty of these. Two advanced pupils were sent that year, one to Ripon College, and the other to Beloit. In 1879, three were sent to Beloit to complete their education.

The teachers who began the work were Rev. J. P. Williamson and Miss Julia

[1] *Missionary Herald*, 1878, pp. 214–217.

A. Lafromboise. She died a year after the school began, but her work did not die. Other natives have done good service — Mr. Eli Abraham, Rev. J. Eastman, Mr. John Rouillard, and Miss E. Aungie. The Home was opened under the charge of Mrs. L. P. Ingham, and Miss M. L. Haines. The teachers now are Rev. A. L. Riggs, principal, who has been connected with it from the first, Miss Martha A. Shepard, Miss Martha M. Paddock, Miss Susan Webb, and Mr. Eli Abraham. The Hall is in charge of Miss Anna Skea, as matron, and Mr. Arthur Ward, as steward. Miss Lucy M. Dodge was teacher till September, 1878, and aid has been rendered in the theological department by Rev. S. R. Riggs, LL.D., and Rev. J. P. Williamson.

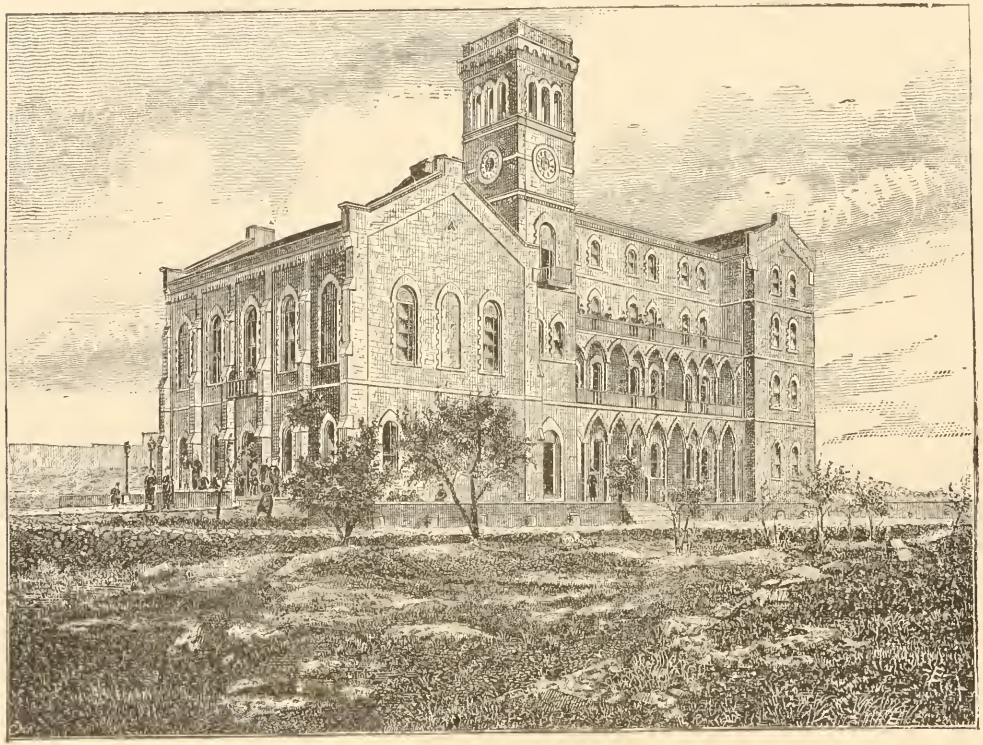
This brief account of education in only one of our Indian missions, shows that the education of Indian youth at Hampton, Virginia,[1] and elsewhere, is by no means the novelty that some suppose; and their education — if we would qualify them for usefulness among their own people — is always most successfully accomplished in the place where they are to labor; for then they are neither lifted out of sympathy with those whom they are to benefit, nor regarded with suspicion as introducing strange customs from abroad.

SYRIAN PROTESTANT COLLEGE.

The Syrian Protestant College at Beirût is an institution important enough to claim especial notice. Beirût, a city of more than eighty thousand inhabitants — thirty thousand of them Orthodox Greeks, twenty thousand Moslems, fifteen thousand Maronites, five thousand Papal Greeks, and five thousand Jews — occupies a central position among the Arabic-speaking races. This language is the vernacular from Morocco to Assyria, also of many tribes in Central and Western Africa. It is the sacred tongue of Turkey, Persia, Tartary, and large portions of India, or of Mohammedans the world over. In 1863 the college was incorporated in the State of New York, where most of its funds are held. The preparatory department was commenced in 1865, and the college proper in the autumn of 1866. A medical class was formed in 1867, and graduated in 1870. The first collegiate class graduated in 1871. The present buildings were erected in 1872–1873. These are: (1) The main building, or literary department, containing dormitories, cabinets, lecture-rooms, library, and chapel; (2) the medical hall, containing lecture-rooms, medical library, dissecting-rooms, and chemical and pharmaceutical laboratories; (3) the Lee Observatory; and (4) a refectory, with dining-hall and rooms for servants. The college is conducted on strictly evangelical principles, but is open to all who comply with its regulations. While there is no interference with the religious preferences of any, and Greeks, Papists, Moslems, Druses, Copts, and Armenians are all represented among the students, each is made acquainted with the distinctive teachings of the Gospel. All boarders are required to attend daily morning and evening prayers, also Sabbath services in the college chapel. And the Bible forms one of the text-books through the week in all the classes. A voluntary weekly prayer-meeting is carried on by the students.

The appliances for instruction are constantly becoming more complete.

[1] *Missionary Herald*, 1879, pp. 247–249.



SYRIAN PROTESTANT COLLEGE.

The observatory, built in part by Henry Lee, Esq., of Manchester, England, has a refracting telescope with object glass of five and a half inches aperture, made by Alvin Clark, of Boston; a ten and a quarter inch reflecting Newtonian equatorial, with micrometers, automatic spectroscope, star spectroscope, solar eye-piece, and achromatic eye-pieces ranging from sixty to eight hundred; a meridian circle, by Ertel & Sons, Munich, reading to seconds of arc; a siderial clock, by Cooke & Sons, York, and a transit instrument in the prime vertical. It has a complete set of meteorological instruments, viz., barometers, thermometers, hygrometer, rain gauges, and anemometer.

The apparatus for experiments in physics is good, and well arranged in a large room of the main building. The chemical apparatus, for general study and for the practical study of analytical chemistry, is in the medical building.

The geological collection is in a large room of the main building, and consists of a conchological collection, containing one thousand specimens, named and classified; a mineralogical collection of fifteen hundred specimens, also named and classified; a series of igneous and aqueous rocks, selected for practical study; fifteen hundred specimens of fossils and rocks, illustrating all the geological formations; the fossils of Syria, named and classified, containing the fine series that established the existence of the Jurassic formation there; a superb collection of fossil fish from Lebanon, containing exceptionally fine specimens of all the species described by Blainville, Agassiz, Egerton, Pictet, Humbert, and Fraas. Some are specimens of species not yet described, and a few have not before been found in a fossil state.

The botanical cabinet contains a series of large models of flowers and fruits, and of their organs of inflorescence and fructification, for use in the class room. The herbarium contains ten thousand species, mounted on sheets, and is particularly rich in Oriental species.

The zoölogical cabinet contains *papier maché* models, illustrating the organs of digestion, circulation, respiration, and innervation of the various orders of the animal kingdom; also a number of skeletons and stuffed birds and animals, with a few specimens in alcohol.

The surgical cabinet contains many pathological specimens, illustrating fracture, dislocation, and other things requiring surgical treatment, and also apparatus for the same, with wax models illustrating various diseases.

The cabinet of *materia medica* illustrates the European pharmacopœias by specimens labeled in Latin and Arabic.

The anatomical, pathological, and obstetrical cabinets contain natural and artificial preparations, and wax models illustrating diseases of the eye and skin, two manikins, and other helps to study.

The nucleus of a library of surgery, obstetrics, *materia medica*, botany, and natural history, has been formed in connection with these cabinets. There is also a good microscope, with physiological and anatomical slides. The library contains a Syriac codex of the ninth century, the Gospels being of the Philoxenian version, and the remainder the Peshito. Besides a classified collection of ancient coins, is a collection of ancient pottery, glassware, lamps, idols, sarcophagi, etc., illustrating the ancient history of Syria and adjacent regions.

Two hundred and fifty antiquities from Cyprus were presented by Gen. Di Cesnola. The library contains about eighteen hundred volumes in the languages of Europe, mostly English, and also five hundred in Arabic.

The members of the faculty are as follows:

Rev. Daniel Bliss, D.D., President, Professor of Moral Philosophy, Natural Theology, and Biblical Literature.

Rev. D. S. Dodge, Professor of Modern Languages.

Rev. C. V. A. Van Dyck, M.D., D.D., Professor of Theory and Practice of Medicine, and Director of Observatory.

Rev. John Wortabet, M.D., Professor of Anatomy and Physiology.

George E. Post, M.D., D.D.S., Professor of Surgery and Botany.

Edwin R. Lewis, M.D., Professor of Chemistry and Geology.

Harvey Porter, B.A., Professor of Metaphysics, Logic, and History.

Richard W. Brigstocke, M.R.C.S., Lecturer on Obstetrics and Medical Jurisprudence.

William Thomson Van Dyck, M.D., Lecturer on *Materia Medica*, Hygiene, and Zoölogy.

William F. Stoutenburgh, B.A., Instructor in English in Collegiate Department.

Yakûb Sarrûf, Instructor in Arabic and Natural Philosophy.

Faris Nimr, B.A., Instructor in Astronomy, and Assistant in the Observatory.

Ibrahim Kefruny, B.A., Instructor in Mathematics.

Sheikh Khattar ed Dahdah, Tutor in French.

Frederic J. Bliss, B.A., Principal of the Preparatory Department.

Jurjius Kefruny, B.A., Assistant in the Preparatory Department.

The language of the institution is English, but those who speak Arabic are taught that language thoroughly.

Boys are received in the preparatory department at ten years of age, in the college at fourteen, and in the medical college at seventeen; and none can graduate there under twenty-one years of age. Testimonials of good moral character are required of all candidates.

In the preparatory department Arabic and English reading and writing, arithmetic, geography, and the elements of grammar are taught; and also French.

The studies of the first year at college are the higher Arabic grammar, prosody, rhetoric and logic, algebra, geometry, English or French, and musical notation.

Of the second year, trigonometry, plain and spherical mensuration, navigation and surveying, Arabic history, English or French prose writers, and composition; also physics.

Of the third year, chemistry, natural philosophy, European history, English and French poetry, composition, lectures on zoölogy, and botany; also Latin.

Of the fourth year, mental and moral science, astronomy, geology, political economy, international maritime and commercial law, modern history of Europe and America, philosophy of history, English logic and rhetoric; also Latin.

Through the whole course are weekly exercises in Arabic and English composition and declamation; also a weekly drill in vocal music.

Candidates for admission into the medical college are examined in arithmetic, algebra, geography, natural philosophy, and English. The studies are:

First year, chemistry and chemical analysis, systematic and practical anatomy, botany and zoölogy alternate years.

Second year, anatomy and physiology, *materia medica* and therapeutics, zoölogy or hygiene, and practical pharmacy.

Third year, surgery, pathology, practical pharmacy, art of prescribing medicine, obstetrics, and diseases of women and children, or medical jurisprudence alternate years.

Fourth year, surgery, pathology, medical jurisprudence, or obstetrics and diseases of women and children alternate years, and reviews.

Students who have studied two years with an educated physician may go through the course in three years. All are required to attend the lectures and hospital practice regularly during the course, study the text-books, and take full notes of lectures.

In the pharmaceutical department, the first year is given to chemistry and chemical analysis, Latin, botany or zoölogy (alternate years), and practical pharmacy; and the second year to chemical analysis, *materia medica* and therapeutics, English, botany or zoölogy (alternate years) and practical pharmacy.

Examinations are of two kinds: oral and written. At the close of each term there are oral and written examinations on the studies of the term, and also at the close of the year on all its studies. Marks for each student's recitations in all the studies are kept in registers. The maximum is ten, and if one does not average over five for all the studies of any year, or falls below five in two studies, he must go over the studies of the year a second time.

Those who finish the collegiate course satisfactorily receive the degree of bachelor of arts. Those who complete a branch of medical study satisfactorily receive a certificate to that effect. A failure here involves the review of the study. Failure in two studies of one year involves the going over all the studies of that year again.

At the close of the four years' medical course, those who have been approved in all the studies, and presented an original medical thesis of not less than fifteen pages, are admitted to a final examination in all the studies of the course; and success here entitles to a certificate which gives them the right by vizerial order to appear before the imperial medical school at Constantinople, to be examined for the degree of medicine and surgery; and those who have studied successfully two years in the pharmaceutical department are, in like manner, entitled to appear before the same imperial medical school for the degree of pharmaceutist.

An alumni association was formed at the graduation of the tenth class, in 1879, which holds a meeting Tuesday evening preceding commencement, when two orations are delivered. The first president was Dr. C. V. A. Van Dyck, and the orators for 1880 were Amin Abu Khâtir, B.A. (1873), M.D. (1877), and Yakûb Mallat, B.A. (1874), M.D. (1878). The annual dinner of the alumni

follows the graduating exercises on commencement day. The president for 1880–1881 is Dr. John Wortabet, and the orators Mr. Naum Mughubghub, B.A. (1870), and Mr. Naum B. Nahoul (1875).

Tuition in the preparatory and collegiate departments is five Turkish liras, or twenty-two dollars. In the medical school it is ten liras, or forty-four dollars, but to graduates of the college only five liras. Board is of two prices, according to quality; one twenty-five liras per annum, and the other only twelve liras.

There lies before the writer a neat Arabic pamphlet of thirty-seven pages, the college calendar for 1878–1879, from which part of the preceding facts have been taken. Some of them have been altered to conform to the catalogue of 1880–1881. The first page of the cover shows the seal of the college, bearing on its face a goodly cedar of Lebanon, and under it the name, El Medresseh El Kulleeyeh, Es Sooreeyeh, El Injeeleeyeh; *i. e.*, the University, the Syrian, the Evangelical. On the second page of the cover is a view of the main building, four stories high, of stone, with round arches over the windows, a stone cloister in front of the first and second stories, and a square clock-tower in one corner. One end, not quite so high as the rest, and at right angles to it, is only two stories high, the upper one being very lofty, and containing the chapel of the college. The fourth page of the cover gives a similar view of the medical school, also of stone and two stories high, except the middle, which is three, as the reader may here see for himself.

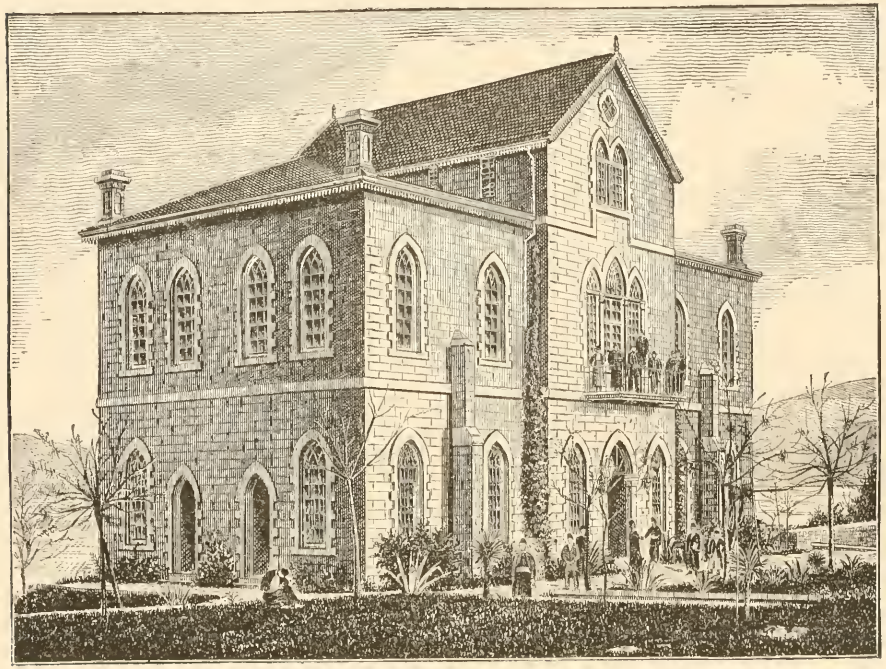
The preface describes the healthiness of its site, overlooking the sea on one side, and the gardens of Beirût on the other; and, after describing the buildings and apparatus, concludes that the facilities for acquiring knowledge are now made so accessible to the youth of the surrounding countries that there is nothing to hinder them from obtaining here all the education they desire.

The schedule of studies in the preparatory, college, and medical departments, is given for every day in the week during the three terms of each year, and the hours when each lecture or recitation takes place; and the student is duly warned of what the monitor will do in case of his absence from any prescribed duty. The written examination at the close of each year is described so minutely that no unlucky wight can plead ignorance of either what was to be done, or how it should be done. The literary societies are described, both in the college and the medical school. One is conducted in English and the other in Arabic.

The catalogue for 1880–1881, printed at Beirût, in English, 8vo, pp. 52, gives the names and present residence and occupation of all the graduates, as well as the present members of the college in all its departments. Their numbers are as follows:

	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	Total.
College proper	5	8	6	7	6	4	5	5	8	5	4	63
Medical College		6	8	5	4	2	6	6	5	5	2	49
Pharmaceutical College						2	1	0	1	2	0	6

Making the total number of graduates one hundred and eighteen. They are



MEDICAL COLLEGE, BEIRUT.

scattered throughout Syria and Egypt. The larger number of them are physicians; but some of them are lawyers, some teachers in the college itself and in high schools, a few are ministers of the Gospel, two are consuls, and two merchants.

There are now (1881) forty-nine students in the medical department, eight of them in a preparatory class, twenty-nine in the collegiate, and twenty-one in the preparatory — one hundred and twenty-one in all — mostly from Syria, but a few from Egypt, five from Cyprus, and one each from Constantinople, Corfu, and Bagdad.

In the "Hospital of the Order of Knights of St. John," founded by the Johanniter order of knights in Germany, five deaconesses from Kaiserswerth have the care of nursing the patients, but the whole is under the medical and surgical care of the faculty of the medical school. Its stately structure in the city can accommodate sixty-three charity patients, besides rooms for sick travelers and others. A small building has been erected, with waiting-hall, operating-rooms, and well furnished pharmacy, and this is used for the clinique, which is open to the medical students, who have here unusually favorable opportunities to become acquainted with diseases and their treatment. Here are performed a great variety of surgical operations, such as reduction of dislocations and fractures, lithotomy, removal of tumors of various kinds, of cataract, operations for hernia, and many more. A pharmacy is attached to the clinique. In 1877 the hospital had five hundred and fifty indoor patients, and ten thousand five hundred in the daily clinique. In 1879 it had five hundred and sixty-four indoor and twelve thousand four hundred and eight outside patients; and in 1880 six hundred, and thirteen thousand eight hundred and seventy-two, respectively.

The Ancient and Honorable Order of the Knights of St. John, in Prussia, having found that their hospital in Beirût, to use their own words, "did more work and cost less than any under their care"— the professors serving the hospital gratuitously, in token of their satisfaction gave to Dr. Van Dyck the decoration of the Order of the Golden Crown, instituted by the Emperor William in 1861, to Dr. Post the Grand Cross of Saxony, and to Dr. Wortabet that of Mecklenburg; and added two large wings to the hospital.[1]

The Hon. E. F. Noyes, our ambassador to France, in a despatch to Hon. W. M. Evarts, secretary of state, after mentioning other missionary work in the Orient, says: "But perhaps the most important and successful of the educational institutions established by Americans in the East, is the college of Beirût, in Syria. Since it was established, the Jesuits, the Greeks, Papal Greeks, and Maronites have opened high schools in that city, so that there are now in Beirût fifty-six schools, with six thousand scholars, all undoubtedly due to the impulse given to education by American missionaries."

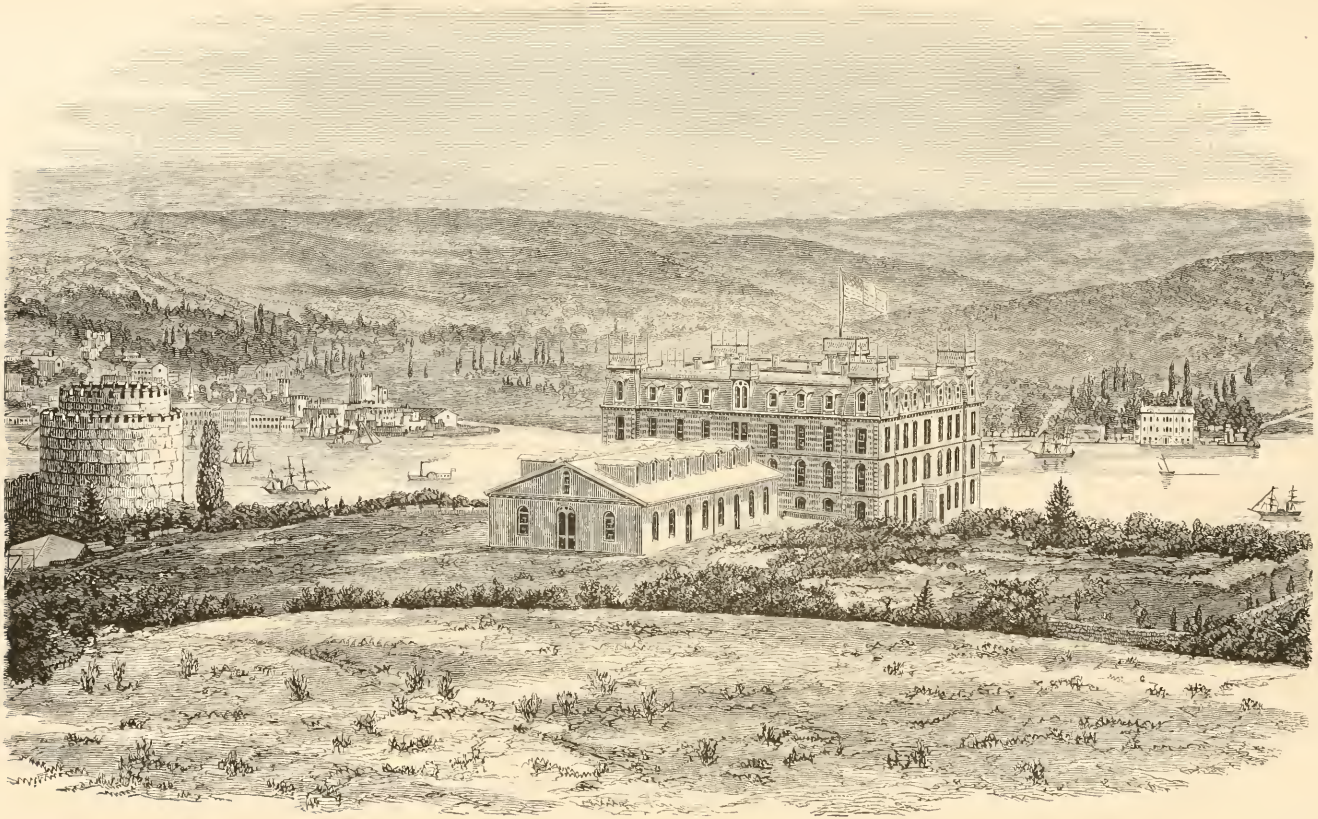
The plates of the college referred to (p. 378) were sent by post from Beirût January 19, 1881. As they have not arrived, duplicates have been sent for, and it is hoped will reach Boston in time for publication, if not in the first issues of this volume, at least in subsequent ones.

[1] *Foreign Missionary*, 1880, p. 523; *Catalogue*, 1880–1881.

ROBERT COLLEGE.

An old Puritan has said, "He who observes Providence will never lack a Providence to observe." This was preëminently true in the origin of Robert College, on the shores of the Bosphorus, and a review of its history will show how intimately it is connected with the missionary work out of which it grew. Our missionary schools created a demand for schools of a yet higher grade. There was a time in the history of our missions to Turkey when it was deemed advisable to discontinue the training school at Bebec, and establish it at some point in the interior, where it could be carried on more economically, and the students would not be so much exposed to the evil influence of European infidelity. Dr. Hamlin, not quite satisfied with the proposed change, was contemplating a withdrawal from the work. At the same time, some belonging to the mission families in Constantinople, had been exceedingly desirous of seeing a Christian college established in that city, so that young men would not need to go to Europe or America to obtain a liberal education; but how was such an undertaking to be accomplished? Here was a man wonderfully fitted by Providence to lay the foundations of such an institution, but who would supply the requisite funds? Just at this crisis the providence of God led the late Christopher R. Robert, of New York, to visit Constantinople. But he did not know Dr. Hamlin, nor had he any thought of establishing a college. One day, strolling along the shores of the Bosphorus, the appearance of a boat-load of bread, such as he was used to at home, attracted his attention, and its grateful aroma led him to inquire where it was made. Out of this insignificant event grew his acquaintance with the Yankee baker, who was now free to engage in laying the foundations of that college which God had brought Mr. Robert there to establish. But for Mr. Robert, Dr. Hamlin could not have secured the means. And but for the ready tact of Dr. Hamlin, in dealing with Turks, and his indomitable pluck and Yankee grit, all the money of Mr. Robert could never have built the college. It is not necessary to follow all the steps of the undertaking, the hindrance caused by our war at home, or the obstacles thrown in its way by Turkish marplots, or the skill and patience by which Dr. Hamlin triumphed over these last. It is enough to say that, thirteen years after his first interview with Mr. Robert, our minister, Hon. E. Joy Morris, laid the corner-stone (July 4, 1869) on the spot which Turkish chicanery and stubbornness had forbidden its American purchasers to use for seven years. Its site is "unsurpassed for varied charms and magnificence of scenery," and overlooks the towers of the fortress erected by Mehmet II, in 1452–1453, preparatory to his taking of Constantinople. The building is one hundred and thirteen feet by one hundred and three, and built of the same kind of stone used to construct the fortress. It is fire-proof, constructed with great solidity, and one of the most prominent objects in the landscape, to those sailing on the beautiful Bosphorus. It was occupied by the college May 15, 1871. An additional building was erected in 1873, and another is now needed for a chapel, laboratory, library, and museums.

The location of the college is in one of the most important centers of influ-



ROBERT COLLEGE, NEAR CONSTANTINOPLE.

ence in the world, especially now, when the East is waking to a new life, and preparing for new destinies. In the advance of modern infidelity, even the Oriental churches recognize its value as a bulwark against it. An attempt has been made to force it to give up religious instruction, and confine itself to secular work, but it failed. Religious teaching there is neither sectarian nor polemical. It is based on the Bible, and on perfect freedom of conscience; but its teachers would have given up the college sooner than the religious instruction which they felt to be essential to their highest success. The value of this moral training is now seen by all classes, and even Moslems send their sons to be under its influence.

Not long since, a Moslem pasha wished his son to enter the college. Dr. Washburn honestly told him that, if he did, he would learn something of the Gospel, and attend Christian worship. "No matter," was the reply, "I wish him to attend, for I notice that students there are taught to regard the truth."

The college represents in Turkey an education whose object is development, and not repression. A distinguished Bohemian professor and historian affirms that its graduates are better fitted for practical life than those educated in France or Germany. It has cost more than $300,000. Its property consists of buildings and real estate, $150,000; library and apparatus, $15,000; funds invested in the United States, $25,000 — with no debt, an income of about $30,000 annually from its students, and needing an income of $10,000 more to equip it fully for its work. With that there is nothing to hinder its students increasing to five hundred, and even more than that.

The catalogue for 1878–1879 gives the number of graduates from 1868 to 1878 as seventy-six, though the total number of different students in attendance during that time had been nine hundred and twelve. The average time of their attendance was two years. The college commenced with four students in September, 1863, and had two hundred and sixteen in 1873. The number in 1878 was one hundred and fifty-one, of whom eleven were seniors, nine juniors, nineteen sophomores, and thirty-six in the two freshman classes. In the preparatory department, seventy-six. The next year, in spite of the terrible condition of the country, it closed with two hundred and nineteen.

In the preparatory department the students, in addition to the native Greek or Turkish, Armenian or Bulgarian, learn the English, French, and German lauguages, arithmetic, and geography. To enter the second freshman class they must be fourteen years of age, and of a good moral character. There, besides the languages already mentioned, they study algebra, geometry (four books), and zoölogy. In the first freshman class geometry is completed; also university algebra and trigonometry, physics, ancient history, Latin grammar and reader, the Persian and Ancient Armenian languages; Slavic also may take the place of Greek.

In the sophomore class, Shakespeare, surveying and navigation, physiology, organic and inorganic chemistry, analytical geometry, and conic sections, modern history, Cæsar and Virgil, constitute the studies. Arabic is also added to the list of languages.

In the junior year they study rhetoric, logic, and English literature, civil engineering, analytical chemistry, mineralogy, botany, physical geography, polit-

ical economy, and the evidences of Christianity, besides preparing original orations.

In the senior year, geology, astronomy, psychology, ethics, history of philosophy, history of civilization, the philosophy of history, commercial and international law, finish the course. During the whole of it the students hear lectures in English and French on literary, scientific and historical themes. English is the language used in instruction. No one who fails to pass the written examination at the end of the sophomore year can go on with the class, and a like failure at the close of the senior year forfeits a diploma. In addition to these are oral examinations at the close of each of the three terms every year.

The library contains over six thousand volumes, and is steadily increasing. It is opened twice every week. There is a large apparatus for the study of chemistry, physics, and anatomy, and a chemical laboratory. In addition to a well assorted cabinet of geology and mineralogy, is a complete collection of the minerals and fossils of the vicinity. The cabinet of seven hundred specimens of the birds of Turkey has attracted the attention of scientists from all parts of Europe.

The annual cost of board and tuition is forty-four Turkish liras ($200); tuition alone, ten liras. Twenty-five students have been aided each year to the amount of $100 each, and prizes are given each year. Thirty were won in 1877–1878.

The students are composed of Armenians, Bulgarians, English, Greeks, Austrians, Americans, Slavonians, French, Jews, Turks, and Persians.

The Armenians, who, more than other races, appreciate European civilization, number two millions. The Bulgarians, who are "the coming race" in southeastern Europe, number five millions, and the Greeks, sometimes called the Yankees of the East, two millions — a constituency of twenty-five millions in all.

The board of instruction consists of:

George Washburn, D.D., President, and Professor of Psychology, Ethics, and Political Economy.

Albert L. Long, D.D., Vice-President, and Professor of Natural Science.

E. A. Grosvenor, A.M., Professor of Latin and History.

Hagopos Djedjizian, A.M., Professor of Armenian Language and Literature.

Stephan Panaretoff, A.M., Professor of Slavic and Bulgarian Language and Literature.

Athanasios Doros, Instructor in Ancient and Modern Greek.

Kaloost Effendi Tirakian, Instructor in Turkish, Arabic, and Persian.

Felix Margot, Instructor in French Language and Literature.

H. George Meyer, Instructor in German Language and Literature.

Charles S. Nash, Instructor in Rhetoric, Logic, and English Literature.

Lansing L. Porter, A.M., Instructor in Mathematics and Elocution.

Edmund M. Vittum, Instructor in Mathematics.

Gennaro Marquesi, Instructor in Italian and Drawing.

Abraham Hagopian, Instructor in Preparatory Department.

Stepan Sourenian, Instructor in Music.

Samuel P. Lockhart, Assistant Librarian.

Of the graduates, three are clergymen, and one is studying theology; eleven are teachers; fourteen belong to the civil list, and one is studying law; two belong to the English civil service; seven to the army; sixteen are merchants;

four are in banks; eight are studying medicine; and two are editors — showing that they occupy positions of influence and usefulness.

It is worthy of notice that when the autonomy of Bulgaria was established, and men of intelligence were needed for positions of influence, a class from this institution stepped forward, and now occupy leading positions in the government of that country.

The Marquis of Bath, in his recent work, *Observations on Bulgarian Affairs*, says: "If the nation rises again to spiritual life, its recovery will be owing in no small degree to the devoted company of American missionaries, who seek to promote the welfare of an oppressed people, regardless of the political influence of their own country, or of the interests of any particular sect. They have aroused the jealousy of no political party. In the darkest times of Turkish rule they succored the oppressed. No religious test has been imposed in their schools, and there is hardly a town in Bulgaria where persons do not owe to them the advantages of a superior education. The result of their teaching has permeated all Bulgarian society, and is not the least important of the causes that have rendered the people capable of wisely using the freedom so suddenly conferred upon them."

As illustrating the spirit of the college, and its channels of thought, we here insert the programme of the closing exercises of its seventeenth collegiate year, July 14 and 15, 1880, copied from the printed programme used on the occasion, only the Oriental titles of the orations are translated into English:

Wednesday, July 14, 3 P. M., Prize Declamations.

Second Freshman Class.— "Abolition of the Slave Trade" (William Pitt), Panayoti Doros. "Sorrow for the Dead" (Washington Irving), Boris P. Kissimoff.

First Freshman Class.— "The Revenge" (Tennyson), J. Baker. "The War in America" (Lord Chatham), Michael G. Christides. "Spartacus to the Roman Envoys," Léon Nersessian.

Sophomore Class.— "Spartacus to the Gladiators" (Kellogg), Hagope G. Arabyan. "Death-Bed of a Traitor" (Leppard), Arshag S. Manoukian. "The Two Conquests of Constantinople" (Alden P. White), Demetrius P. Markoff.

Junior Class.— "Emmet's Vindication," Vasil Karayovoff. "Lafayette" (Sprague), Stephan B. Petroff.

Prize Debate between Freshman and Sophomore Classes, 8 P. M. Question: "Are frequent elections an advantage to a State?" Affirmative, Sophomores — Ardashess S. Muggerian, Arshag S. Manoukian, Ivancho T. Belopitoff, Haroutiun M. Sebian. Negative, Freshmen — Gani Gr. Jabaroff, C. H. Dimitroff, Othon M. Jilajian, Michael G. Christides.

Thursday, July 15, 10.30 A. M., Closing Exercises.

Orations by the Graduating Class:

"The Pleasures of Difficulty," Yanko G. Penoff, Tatar Bazardjik E. R.

"Religion and Nationality," Hovhannes T. Gulbenkian, Cæsarea.

"The Italian Revolution in 1848," Ivan B. Milcoff, Plovdiv. E. R.

"Bulgaria in the time of Tzar Simeon," Yordan H. Petroff, Kotel. E. R.

"The Principle of Nationality," George Peneff, Tatar Bazardjik E. R.

"Le Tiers Etat," Haroutiun N. Mosditchian, Cæsarea.

"Excelsior!" M. Nevdon Boyajian, Constantinople.

Presentation of Diplomas.

Award of Prizes.

Addresses.

Prayer.

Doxology.

The exercises were varied by music.

The names ending in *ian* are Armenian, in *off* or *eff* Bulgarian, and in *ides* Greek.

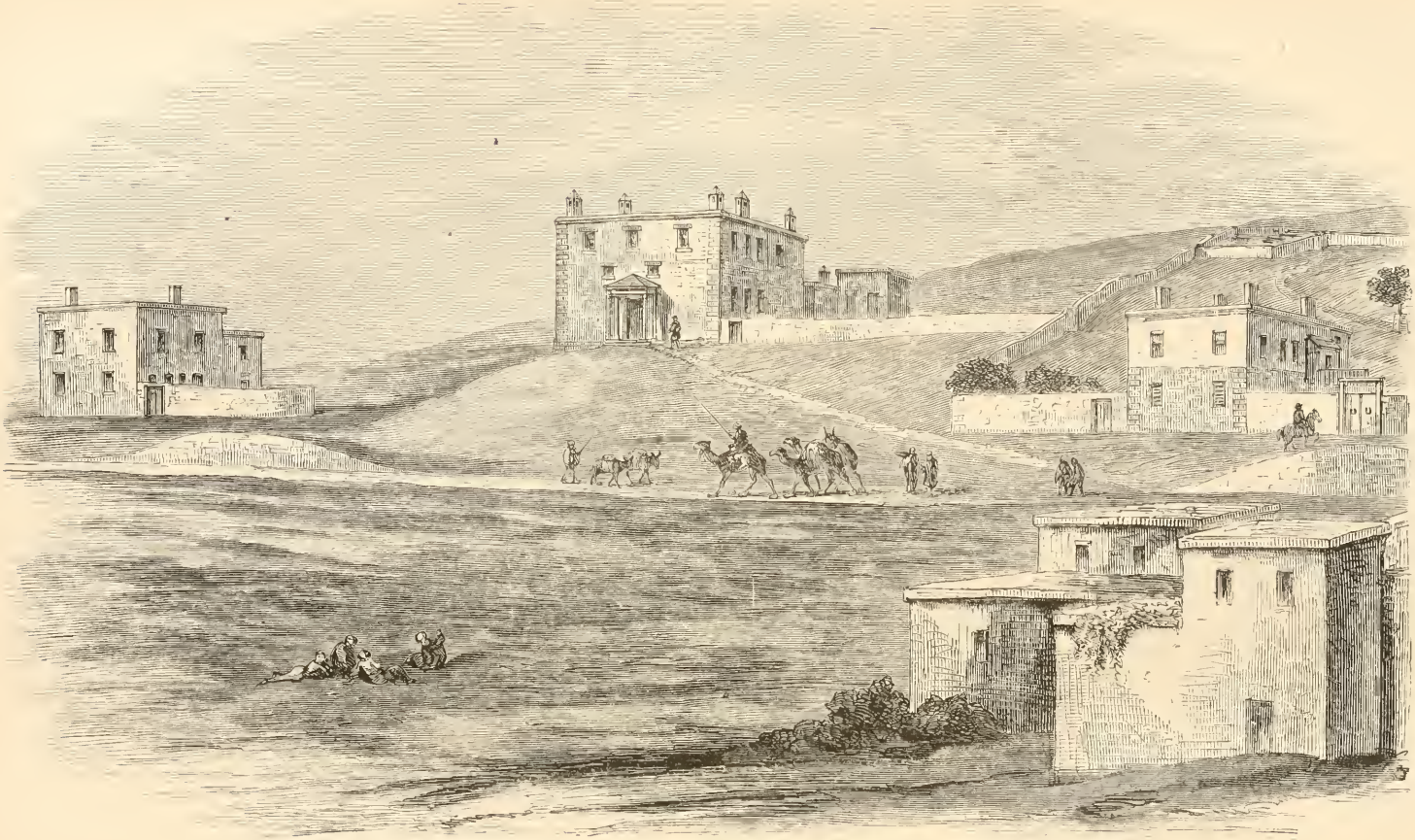
ARMENIA COLLEGE.

The missionary in the interior finds that he cannot send his young men to the capital for education, lest they acquire tastes and ideas of things that unfit them for either happiness or usefulness at home. So they must be educated in the field where they are to labor. For this reason the training school at Tocat was established in 1855, under Dr. H. J. Van Lennep; after the burning of the mission premises there, it was transferred to Harpoot, in 1859, with Rev. O. P. Allen as principal, and Revs. H. N. Barnum and C. H. Wheeler as associates. The course of study embraced four years; four and a half months of each year being devoted by the students to evangelistic work in the regions beyond. Any one eighteen years of age, of good Christian character, and desirous to learn to preach the Gospel, if he had a common school education, was admitted on trial for one year. If, at the close of that, his developments did not encourage further outlay, he was sent back to his original calling. So, also, at the close of the second year, others were dismissed as fitted for teachers, but not for preachers of the Word. In the course of study the Bible was the main text-book. Besides that, they attended to Armenian grammar, geography, and a brief course in mathematics, astronomy, chemistry, natural, mental, and moral science, and church history. The third year was devoted to systematic theology, and the fourth to the preparation of sermons, some of which were required to be written, that they might not, as phrased by one of themselves, "give hot water for soup," and part unwritten, that they might not be mere book-worms, but live laborers among their people. So there was great care in the original selection of the men, that only the most promising might be received. Then equal care was taken that their pecuniary wants should not exceed the ability of their people to supply; and their education, from first to last, was most thoroughly Christian. The total number of pupils up to 1867 was ninety-six, including nine speaking Arabic, from Mardin, and six speaking Kûrdish, from Kûrdistan. Eighteen graduated in 1863, seven in 1865, and eleven in 1867. The building then in use had a chapel in the first story, and four recitation and four lodging-rooms in the first and second.

This training school, or theological seminary, has now become one of the departments of Armenia College, which was opened in the spring of 1878; and is visibly represented by a new building, which forms a very prominent feature in the landscape. The opposite page gives a view of the premises previous to its erection.

The college consists of four departments: First, a normal and preparatory department, the number of students in 1879 being eighty-three. Second, a college department, divided into four classes. In these there were, in 1879, ten seniors, eight juniors, thirteen sophomores, and eight freshmen, who, judging from their names, were all Armenians. The same nation seems to furnish almost all the native teachers of the college, who are as follows:

Rev. C. M. Shimavonian, Professor of Mental and Moral Science, Rhetoric and Logic.



THEOLOGICAL SCHOOL AT HARPOOT.

M. A. Melcon,[1] Professor ot Armenian Classics, Greek and English.

H. Enfiajian, Tutor in Mathematics, Physiology, and Armenian History.

Hoja Reschid Effendi, Instructor in the Turkish Language and Literature.

Besides these, three Armenian young ladies teach in the female department.

The course of study in the preparatory department includes the common branches, Armenian history, algebra, vocal music, book-keeping, English and Turkish. In the college proper the studies are the Armenian classics, general history, geometry, trigonometry, astronomy, physiology, chemistry, natural, mental, and moral science, logic, rhetoric, Turkish, Latin, Greek, French, and international law. Attention is also given to drawing, painting, and music, both vocal and instrumental. The Bible is a daily text-book in all departments. A third department will be described under the head of the female seminary; and the fourth is the theological seminary.

Rev. G. C. Reynolds, M.D., of Van, thus describes his impressions of the college: "I found a collection of most promising young men, whose gentlemanly bearing and correct deportment would do credit to a first-class American college. It was pleasant to see a school in the Orient moving like clock-work, and that so largely under native teachers, and it gave me a new idea of the capabilities of Oriental character under proper influences. Mr. and Mrs. Wheeler are doing a great work in bringing the institution into such fine working order. Its fame attracts even Turks from long distances to examine it. A Turk, an Armenian, and a Protestant, came from Geghi for that purpose while I was there."[2]

Lieutenant-General Baker, known also as Baker Pasha, when on a tour through Asiatic Turkey, with a commission from the sultan to inquire into the condition of the people and suggest some feasible plan of reform, visited Harpoot, and inquired particularly into the educational work there; and besides personal expression of cordial approval and sympathy with it, wrote the following note to Mr. Barnum before leaving:

"DEAR MR. BARNUM — I cannot leave Harpoot without sending you a small offering in aid of your admirable institution, and I enclose a check on Messrs. Hanson & Co. for ten liras ($44.00). Reform in Asia Minor, to be permanent, must be based on an improved system of education. All who are striving for the amelioration of the condition of the people owe a deep debt of gratitude to the American missionaries for the lead they have taken in this good work. You have had to struggle with many difficulties, but you have no reason to be disheartened at the result of your exertions. It has afforded me unmingled satisfaction, during my tour of inspection through Asia Minor, to see the impetus given among people of all creeds through the practical example of possible improvement in education afforded by the American schools.

"True, we are yet but at the commencement; but I promise you that all my efforts shall be directed to pressing upon the government the absolute necessity

[1] Prof. Melcon is a graduate of the institutions at Bebek and Basel, and was for some years a missionary of the Basel and Church Missionary Societies at Ispahan, Persia, where he had a salary of £200 ($1,000), £70 annuity if disabled, and £60 per annum to his wife if left a widow; but he came to Armenia College, on a salary less than $300 and no annuities, because the work there seemed to promise so much greater blessing to his people.

[2] *Missionary Herald*, 1879, pp. 473–474.

of organizing a system for the better education of the people of Asia Minor. In the creation of such a system, the grand work already done by you and your colleagues will prove of inestimable aid.

"With many thanks for all your kindness during my short stay in Harpoot, believe me

"Very truly yours,

"V. BAKER."

In 1880 the schools connected with this mission were graded into primary, intermediate, high school, and the college. The first occupies two years, and the others four years each. Payment for tuition is required of all, even though the church, or the young men's Christian associations have to aid the parents in meeting it. Yet, even so, the Bible schools hold their own against those of the old church, which erects costly buildings, imports teachers from the capital, and compels its children to attend them.

The preparatory department of the college was diminished by the opening of high schools in Arabkir, Diarbekir, Hooeli, Malatia, Mezereh, and Palu. Yet ninety-one pupils attended; forty-seven in the male department, and forty-four in the female. In the college proper were forty young men: eighteen freshmen, eight sophomores, seven juniors, and seven seniors; and eleven young ladies; eight of them in the first class and three in the second — making eighty-seven young men and fifty-five young ladies connected with the college in 1880, or one hundred and forty-two in all, after a graduating class of ten had left the institution. A very good showing for the twenty-fifth anniversary of a mission so far in the interior of Turkey.[1]

CENTRAL TURKEY COLLEGE.

Aintab is best known as the home of the young ladies' seminary commenced by Miss Proctor in 1860. But while one sex enjoyed the advantages of that, Rev. T. C. Trowbridge labored to establish a higher institution of learning for

[1] Rev. J. K. Browne, in *Harpoot News* for January, 1881.

the young men. December 3, 1874, the people of Aintab paid the last installment of their subscription of one hundred and sixty thousand piasters ($7,050 in gold). In their poverty this showed very great interest in the enterprise, for a laborer earns only twenty-five cents a day, and boards himself. Twenty thousand five hundred dollars was subscribed in England in 1875, and seventeen thousand nine hundred and ninety-three dollars and forty-one cents in this country. American Sunday school scholars gave two thousand five hundred and eighty-six dollars and two cents for the college building, and Taha Effendi, a wealthy Moslem of Aintab, presented the college with a valuable site, containing about thirty-four acres.

The main building, as seen in the engraving, is of stone, and overlooks the western approach to the city. Its length is one hundred and sixty feet, including the wings, which are fifty-two feet long by twenty-eight wide. The enclosed area is about fifteen acres. The small building on the right was given, chiefly by friends in England, for the use of the president.

The college was opened October 11, 1876, with eleven students in the freshman class, and twenty-seven in the preparatory department. The whole number in attendance soon rose to fifty-five.

The studies pursued are the English, Turkish, and Armenian languages, algebra, geometry, trigonometry, anatomy, natural philosophy, astronomy, physical geography, composition, and declamation.

The faculty are Rev. T. C. Trowbridge, President, Prof. Henry Lee Norris, M.B. (Edinburgh), Prof. Alexander H. Bezjian, Prof. K. H. Sewny, M.D., and Mr. Ovagim, Tutor; the last a graduate of Robert College, Constantinople. The medical work was an attraction from the first, and early efforts were made to establish a dispensary, a hospital, and a place for clinical instruction.[1]

Near the close of 1878 President Trowbridge wrote that two men "had come from Diarbekir to enter the medical department, one bringing a wife and three children. Another from Egin, and another from Baghchijik desire to come. Though some of the medical class of last year were obliged to leave, yet Dr. Sewny will have fifteen in his class this year."[2] In a later letter he says: "Young men are pushing into the college from various directions. The number is already eighty, and more are coming. The greatest trouble is that most are very poor, and hope to work their way through."[3]

The policy of the Greek church was intensely hostile to schools; but, under missionary and other influences, the Bulgarians in 1870 reported three hundred and thirty-seven schools, some of them of a high order, with sixteen thousand five hundred scholars, two thousand six hundred and fifteen of whom were girls, and the avowed aim was to have no Bulgarian, boy or girl, grow up without a common-school education; and still the work goes on. So that our missionaries are free to devote themselves in the line of education to training up helpers for evangelistic work.

Our educational work in Turkey is carried on in two hundred and ninety schools, with eleven thousand six hundred and twenty-eight scholars of both sexes, besides many adults under instruction. There are high schools to fit

[1] *Missionary Herald*, 1878, p. 72. [2] Do., 1879, p. 61. [3] Do., 1880, p. 67.

young men for college, theological seminaries at Samokov, Marash, Marsovan, Harpoot, and Mardin, and the students, carefully selected, are carried through a four years' course of study. Hon. W. E. Baxter, member of the British parliament, said recently in Scotland: "Wherever I traveled, from Egypt to the Danube, men of all races and creeds testified unanimously that the churches and literary institutions, conducted by the Americans with marked ability and freedom from sectarian narrowness, were doing more for the elevation of the masses in the East than any other agency whatever. Education among the Greeks had been greatly stimulated by the splendid work of the American missionaries." He regarded the work of the American Board as invaluable toward settling the Eastern question.

INDIA.

Besides the common schools established by the mission in Ceylon, the seminary in Batticotta was established for boys in 1823, and continued in operation thirty-one years. Dr. Poor was the first principal, and connected with him in 1835 were Mr. Hoisington and Dr. Ward, besides eight native graduates of the school. Mr. Hoisington was principal from 1836, with a short intermission, till 1849. Its graduates numbered six hundred and seventy, and in 1855, out of four hundred and fifty-four then living, one hundred and twelve were engaged in missionary work, one hundred and fifty-eight were in government service, one hundred and eleven in secular business, and seventy-three were not reported. Two hundred and sixty of the four hundred and fifty-four were members of the church. It has been to Jaffna district what Yale College was to Connecticut.

The common schools in connection with this mission in 1870 were committed to the care of a native board of education, on which the mission was represented, and the growth of the schools under this arrangement was as follows:

	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878
Number of schools,	49	60	66	88	105	117	121	125	132	135
Number of scholars,	2,341	2,631	3,243	4,797	5,872	6,504	6,588	7,639	7,291	7,805

No bad illustration of the vitality of Protestant missions, and the permanent nature of their results, in marked contrast with those of Papal missions. During these years a good proportion of the scholars have been girls. In 1877 they were one thousand three hundred and fifty-two. It should also be stated that the larger part of the expense was paid by the government. In 1872 four sevenths of the entire cost was thus paid, and in 1873 fourteen thousand two hundred and sixty rupees.

The Batticotta Seminary ceased in 1855, only to reappear as the Batticotta Training School, and attain to a greater usefulness. In 1876 it had thirty-five pupils in four classes, pursuing a regular four years' course of study. Out of one hundred and twenty-three graduates, one hundred were professed disciples of Christ, and well qualified for usefulness. In 1877, out of sixty-six additions to the churches, forty-five were from the mission seminaries; and of one hundred and seventy-eight teachers, one hundred and twenty-five were educated in

them. In 1872 fifty-six out of one hundred and nine teachers were church members.

Jaffna College commenced in 1871, and had four classes for the first time in 1875. Since then it has matriculated one class and graduated another every year. The catalogue for 1879–1880 is a neat pamphlet of thirty-four pages, printed at Batticotta. It gives a list of twenty-one directors, many of them natives, and an executive committee of seven. The trustees of the foreign endowment fund reside in Boston, Mass., of whom Rev. A. C. Thompson, D.D., is chairman. This fund is intended to be one hundred thousand rupees ($50,000), but at present is only thirty-seven thousand, and is intended to furnish the salaries of the American teachers. The corps of instructors are: Rev. E. P. Hastings, M.A., principal; Rev. T. P. Hunt, and five others, who seem to be native graduates of mission seminaries. Two of these appear also on the list of resident graduates, who pursue the study of English literature, astronomy, chemistry, mental philosophy, and Latin further than the regular course. Then follow the names of twelve seniors, eleven of the senior middle class, nineteen of the junior middle, and twenty-two freshmen; sixty-four in all.

Some knowledge of arithmetic, algebra, geography, history, and English grammar is required for admission.

The same studies are carried further in the three terms of the freshman year, with Scripture history, Tamil, and translations from English to Tamil, and *vice versa*.

The second year the students carry these studies still further, with the addition of Tamil classics, English literature, compositions in English and Tamil, and Wayland's *Moral Science*.

The third year they commence Euclid, physical geography, logic, and Latin, and complete all of the preceding studies not finished before, except English literature, which continues through the course.

The fourth year they study plane trigonometry, evidences of Christianity, natural philosophy, rhetoric, and write compositions only in English.

Lectures are given during the course on chemistry, geology, botany, the art of teaching, and on anatomy and physiology.

The usual statements are made concerning rhetorical exercises, religious instruction, the library, which includes access to the library of the mission, and the free use of chemical, philosophical, and astronomical apparatus. The college has, also, a collection of minerals and shells.

Four examinations are described: viz., the preliminary, junior, senior, and post-graduate examinations.

The terms this year are: first, from July 3, 1879, to October 9, with vacation of three weeks; second, from October 30 to February 5, 1880, with vacation of four weeks; and third, from March 4 to June 1, with vacation of three weeks.

Each student pays an entrance fee of ten rupees, and each term, in advance, ten rupees for tuition, about sixteen rupees for board fourteen weeks, and for books and stationery five rupees more.

Several scholarships are in different stages of completeness, only one as yet being available, and a few permanent prizes have been provided for. More

than thirteen hundred rupees have been expended on a gymnasium, but though it is used, it is neither complete nor free from debt so far as completed.

The names of the alumni then follow: seven of 1876; four of 1877; seven of 1878; and seven of 1879; with a list of those who have received prizes.

The officers of the alumni association, organized in 1878, are given. More than four pages of matter, partly historical and partly descriptive, follow, and an equal number of pages of contributions in various sums, from two hundred rupees down to two, close the list.

There are institutions of learning in the Marathi, and other Indian missions, only not so prominent, or so long established as those in Ceylon.

CHINA.

Missionary education has been carried on less extensively in China than elsewhere, because Chinese boys can learn cheaper at the native schools than a foreigner could teach them. At first adults were reached through teaching their children; but this method grew into disuse through lack of funds.

The case was different with girls, for they were seldom taught to read; and yet their education was needful to fit them for efficient coöperation in Christian work. The high position accorded to learned women in China has aided the elevation of the sex. There has been no prejudice against female education to be overcome, as in Moslem lands, and our "Woman's Boards" have greatly promoted this branch of mission work. In the hands of ladies set apart to this special agency, the schools have become efficient and permanent. There is some danger lest they be educated out of sympathy with their surroundings. Yet grace has enabled graduates from these schools to overcome all that is unsympathetic in their home associations, and to shine like lights in the darkness around them, drawing up to their higher level, rather than being dragged down by daily influences for evil.

Foreign merchants in Canton organized the Morrison Education Society in 1836, which for twelve years labored with success, and sent forth several graduates, who have attained to high positions. When that school closed, missionary societies took up the same work in many places along the coast. St. Paul's College and the London Mission schools at Hong Kong, the Presbyterian schools at Canton and Ningpo, the Episcopal school at Shanghai, our own at Peking and Fuhchau, and the Methodist schools at these two places, have done much in this department.

School-books have been prepared in geography, arithmetic, physics, natural history, astronomy, mechanics, medicine, chemistry, and general history, some of them carefully illustrated. Yet none of these branches are yet taught in common native schools, unless arithmetic forms an exception.[1]

The training school at Tung Cho, in North China, where five young men graduated in 1879, and the Bridgman School for girls, at Peking, under the care of Miss Mary H. Porter and her able assistants, also the boys' school there, are doing a good work for that portion of the empire. The boys' boarding school, in Fuhchau, under Dr. Baldwin, and the girls' boarding school in the same city, are doing a similar work for that province.

[1] Dr. S. Wells Williams, in *Presbyterian Review*, 1881, pp. 42–43.

FIRST GRADUATES OF KIOTO TRAINING SCHOOI, 1879.

Okada. Morita. Fuwa. Kosaki. Ise. Kanamori. Ebina. Yamasaki.

Ichihara. Miyagawa. Kato. Yoshida.

In Japan, the work of Capt. L. L. Jones deserves mention as the pioneer of our training school. A graduate of the military academy at West Point, and for some years a teacher there, he did good service in the regular army during our civil war, and after that was engaged by an ex-daimio to take charge of a scientific school at Kumamoto, on the shore of a large bay on the western side of the island of Kiusiu. His Christian influence there was blessed to the conversion of about thirty of his pupils, the most of whom followed him into our training school at Kioto, turning away from positions with liberal salaries under government, to prepare themselves, through much self-denial, to preach the Gospel to their countrymen. Earning $3.50 per month, they paid $2.50 for board, and had $1 left for clothing, lights, fuel, books, stationery, and all other et ceteras, including benevolent offerings given every week.

This training school was established by Rev. J. Neesima, who left Japan at great personal risk, and came to the United States for an education. Here he was taken under the care of a large-hearted Boston merchant, and after ten years' study returned a Christian, devoted to the salvation of his countrymen. His parents were the first fruits of his labors, and he sent some of their idols to his benefactor in Boston. Through his influence, five and a half acres of land were secured in Kioto, a compact city four miles long and two in width, situated at the center of the empire, in a populous valley nearly surrounded by mountains. It contains three thousand five hundred Buddhist, and two thousand five hundred Shinto temples, with a population in 1872 of five hundred and sixty-seven thousand three hundred and thirty-four. It is the spiritual capital of Japan. Here Buddhism has its headquarters, which it mans with eight thousand priests; and here, through the personal efforts and influence of Mr. Neesima, permission was obtained to open a Christian school, in which missionaries might teach. The buildings were dedicated September 18, 1876, though the school was opened November 29, 1875, with eight scholars, all but one of them Christians, and soon increased to twenty-six boarding and an equal number of day scholars. Soon after the dedication the number rose to sixty-eight, forty of them church members, and all setting forth the Gospel according to their ability at more than fifty centers in and around the city. Rev. J. D. Davis wrote, October 17, 1878, that eighty-seven were then in the school—some from Higo, three hundred and fifty miles southwest, and some from the island of Jesso, five hundred miles northeast. Of these, forty-three were church members, and not one of the whole number but was an earnest student of the Bible. In 1879 the school numbered one hundred and twenty-seven boarding scholars. Fifteen of these finished the theological course, and entered on their work as preachers of the Gospel.

The course was changed from five to seven years, English studies occupying five years, and theology two. The first year is devoted entirely to English; the second to arithmetic, geography, and grammar; the third to history and mathematics; the fourth takes natural philosophy, astronomy, chemistry, and rhetoric; and the fifth political economy, geology, mental science, international law, history of civilization, and logic.

Instruction is given through the whole course in the Gospels, Old Testament history, harmony of the Gospels, and the evidences of Christianity.

The theological course includes theology, pastoral theology, the Christology of the Old Testament, and moral science, taught by Rev. J. D. Davis; church history, Bible geography, antiquities, and New Testament exegesis, by Rev. D. W. Learned. The latter also instructs in political economy, and Mr. Neesima teaches in geometry, natural philosophy, and astronomy.

Of the fifteen graduates in 1879, four remained as teachers in Kioto, six entered the ministry, and four continued as resident graduates and assistants.[1]

It ought to be added here that President Clark, of Amherst Agricultural College, organized a similar institution in Japan, on the island of Jesso, in the extreme north, and here also several of the students became Christians themselves, and at once began to tell others of their Saviour.

At the mission conference in London, October, 1878, it was stated that there were then thirty mission schools in Japan, besides a theological seminary and a college established by the Presbyterians.

EDUCATION OF WOMAN.

Other pages in this volume show how dire is the destruction that heathenism works out in its degradation of woman, so that the mere sight of what she endures would have led missionaries to do all in their power for her relief; but, strange as it may seem, sometimes false religion has found its strongest bulwark in her passionate devotion, and missionaries were sometimes led to work for her regeneration not from compassion only, but because her influence at home counteracted their labors in behalf of other members of the household.

The difficulties in the way of reaching her, and the obstacles encountered by the pioneers in the work of her disenthralment, almost exceed belief. Not one instance is now recollected in which missionaries could begin with establishing a school for her education. They could only prepare the way for this by taking individuals into their families for instruction. Mrs. Spaulding, in Ceylon, could not find one heathen parent willing to incur the disgrace of having their daughters learn to read, and could not induce a single girl to receive the education that she longed to impart. She often approached girls, hoping to prevail on them to make a beginning, but they fled from her in terror, till at length, by the present of some fruit, she induced two frightened ones to approach, and gradually won their confidence until she induced them to learn to sew, by a promise that the pretty dresses, after they had made them, should be all their own.[2] Similar difficulties were met in different and widely separated portions of the heathen world.

Beirut Female Seminary.

For a number of years, missionary ladies in Syria, notably Mrs. Matilda S. Whiting and Mrs. C. S. DeForest, had taken native girls into their families for

[1] Rev. D. W. Learned writes, April 11, 1881, that the theological class numbers twenty-eight (on a later page Dr. Gordon says thirty, nine of them from Okayama and vicinity, six from Shikoku, and three from Fukuoka). Most of them are already engaged in Christian work, or expect to be soon, and more than half of the number either pay their own expenses, or are supported by their own people. One of them earns his living by the sale of Bibles on Saturdays. *Missionary Herald*, 1881, pp. 267, 273.

[2] *Missionary Herald*, 1874, p. 314.

PROTESTANT FEMALE SEMINARY AT BEIRUT.

education; but, looking to the future, it was felt that there should be a self-supporting female seminary conducted by natives. In October, 1862, such a seminary was opened, under the care of Mr. Araman, with Miss Rufka (Rebecca) Gregory, one of Mrs. Whiting's pupils, as assistant, and Mrs. Araman as matron. At the end of the year the pupils numbered twenty-five. In 1864 Dr. Jessup collected $7,000 in the United States, for a suitable building, and in 1866 the seminary moved into the old mission house, which had been fitted up for it at a cost of $10,000. At the close of 1865 there were upwards of sixty pupils — forty-two boarders, and the rest day scholars. In November, 1868, Miss Eliza D. Everett and Miss Ellen Carruth took charge of the institution, though Mr. Araman remained as Arabic teacher. Miss Everett still remains principal, though there have been several changes in her associates. In July, 1873, the first class of three graduates received their diplomas. The present faculty, besides the principal, are: Miss Ellen Jackson and Miss Lizzie Van Dyck, associate principals, Michael Araman, teacher of Arabic, Madame Maria Churi, teacher of French, and seven native assistants.

The course of study, which is in Arabic, occupies four years, embracing in the first year, arithmetic, grammar, and Dr. Calhoun's *Introduction to the Study of the Bible;* in the second year, grammar and Bible introduction continued, composition, physiology, botany, and *Life of St. Paul;* third year, grammar and composition continued, harmony of the gospels, meteorology, and natural philosophy; and fourth year, evidences of Christianity, rhetoric, astronomy, and lectures on the science and methods of teaching. General history is also studied. English, French, and piano are extra, and drawing and painting in water colors are optional. Singing and calisthenics extend through the whole course. The pupils attend the Protestant church and Sabbath school, and a weekly prayer-meeting among the pupils is an established institution. For five years the expenses have varied from $4,475 to $5,500 annually, and the receipts from pupils have risen from $730 to $1,160, by a steady increase. About half of the pupils are from the Greek sect; the rest are Protestants and Papists. A few Druses and Moslems have also been among them. Fourteen in all have received a diploma. But those taught here, for a longer or shorter time, are scattered throughout Syria and Egypt, as teachers, wives of pastors and teachers and merchants, and with rare exceptions give good evidence that the labor bestowed on them has not been in vain. In dress and manners, in the ordering of their homes, and in society, they bear testimony to the elevating power of a thorough Christian education.

Dr. H. H. Jessup, who remembers when the Syrian Evangelical Girls' Seminary was opened, with only four charity pupils, attended its commencement in 1880, when nearly fifty boarders from Syria and Egypt all paid for their tuition either wholly or in part. More than $1,000 had been expended that year by Syrians for the education of their daughters in this Christian institution, in a land where formerly girls were regarded as fit associates only for donkeys, dogs, and swine.

The arbor at the doorway was illuminated with lamps of American astral oil, amid fragrant flowers and shrubs. Inside, the teachers stood waiting to

receive their guests. The library, the piano, the paintings on the walls, the floral decorations, and, above all, the hearty welcome in his mother tongue, made him almost lose sight of Syria, though the building rested on the old foundations of Phenician, Greek, and Roman structures; but soon the array of Syrian young ladies reminded him that he was in the land of dark eyes and veils, of henna and azars. Their faces, however, wore not the surface beauty of ordinary Syrian women, but the deeper loveliness of thought and moral excellence.

There was a printed programme that told of vocal and instrumental music, reading of Scripture and prayer, an address by Prof. Wortabet, and the giving of the diplomas by Miss Everett. American parlor organs find their way to Syria as fast as her daughters are taught here how to use them. Pencil sketches and water-color paintings adorned the walls. The vocal music, both Arabic and English, was well rendered. The ode they sang was original.

The graduates were only three: Miriam, from Deir el Komr, whence our missionaries were expelled by force thirty-five years before; Beuder, from Zahleh, where the people have twice driven missionaries out, but where now the Protestant church overlooks the town; and Angelina, from Tripoli. The grandfather of this last had stood godfather to all the Orthodox Greek children in the city, but sent his own granddaughter to the mission school. Her younger brother is now an eminent physician in Tripoli, a graduate of the Beirût medical college.

Dr. Wortabet's oration was addressed partly to the graduates and partly to the audience, and at the close he contrasted the scene then before him with the previous condition of woman, when a man near Gaza yoked his wife and ox together to plow his fields.

After the benediction there was a very pleasant reunion of the former graduates with their husbands and other friends. One, a tutor in the college and editor of a scientific monthly, spoke very pleasant words of gratitude for the admirable education so many of their wives had here received, especially that moral and religious training that gave true delicacy and lady-like repose of manner, a capacity for conversation, and for being true helpmeets for their husbands. Nor was mirth-provoking rhyme wanting on the part of other speakers, one of whom kept the company in a roar with his happy hits.

It was one of the innovations of the occasion that some of the graduates were dressed in mourning, a thing that formerly would not have been allowed in a public assembly; but it was one of the milestones that mark the progress of the elevation of woman in Syria.[1]

A female boarding school was established at Sook el Ghurb in 1858, under the care of Miss Amelia C. Temple, who returned to the United States in 1862, as Mrs. George Gould; and there was another at Sidon, to which young ladies came from all parts of Syria, even from as far north as Hums and Safeeta. The school, though in sympathy with the mission, was in charge of two English ladies, Mrs. Watson and her daughter, and after them, of Miss Jacombs, for five years a teacher on Mt. Lebanon. The number of pupils was twenty.[2]

[1] *Foreign Missionary*, 1880, pp. 122-125.

[2] Dr. Anderson's *Oriental Churches*, p. 385.

The Constantinople Home.

Early in 1869, the foreign secretary of the American Board asked the Woman's Board of Missions for a Home in Constantinople, which should be the center of a threefold Christian work for woman, missionary, medical, and educational, in that city and vicinity. He asked for $3,000, and received it. In the autumn of 1870, Miss Julia A. Rappleye was sent out to commence the work. A building was rented in Stamboul, and in October, 1871, the first session opened with three pupils. During the first year the school gradually increased in numbers and in popular favor. The design involved a center for Christian work, connected with the religious culture of young ladies. All its arrangements sought the development of a symmetrical Christian character in the pupils, fitting them to create well-ordered Christian homes, to be wives of pastors, or teachers of higher schools for their own sex, such as would command respect in the capital or elsewhere.

The lady in charge of city missionary work would not only engage in it herself, but train up others to do the same; and the resident physician would not only coöperate in her department, but so instruct the pupils in physiology and the laws of health, as to make their future homes very different from the present homes of Turkey. It would thus most efficiently and economically promote female education. Then, while payment was to be required from the pupils, a limited number of free scholarships extended its advantages to a larger circle. This arrangement would make the institution better appreciated, and its results more substantial and permanent. So twenty-five Turkish liras ($110) was charged for boarding scholars, and half a lira a month ($2.20) for day scholars, payable in advance. The wisdom of this arrangement is seen in the fact that the Home is now self-supporting.

The school grew rapidly; good order and discipline were established; girls unused to restraint in the family met the requirements of school life like the daughters of our own Christian homes. The awkward shyness of those till now secluded from society, gave place to lady-like self-possession; and the thoroughness of their scholarship was the wonder of their friends. Better than all, some of them gave token of entering on a new life, whose reality was evinced by the marked change in their deportment and spirit in daily life.

This success called for an enlargement of the work, and $50,000 was now called for to erect a suitable building, and place the enterprise on a permanent basis; and though the Woman's Board had already pledged $31,000 for the year, they nobly took this up in addition to their regular work, in the fourth year of their existence as a society.

A beautiful site was selected in Scutari, a city of sixty thousand inhabitants, which is to Constantinople what Brooklyn is to New York; but, owing to Turkish obstructiveness, two years passed before the title to the property was finally secured.

At the close of the second year, July, 1873, the number of pupils was twenty-five. The lease in Stamboul had expired, and a larger house was rented in Scutari, for two years, after which it was hoped the new building would be ready.

Two prosperous years followed, and the rented structure became far too small. In 1875 several teachers failed in health, owing to their narrow quarters, but the school held its own. As usual in Turkey, many difficulties had to be surmounted before permission to build was secured; but in December, 1874, work had been begun, and, in spite of opposition, went rapidly forward. It was so nearly finished in November, 1875, that the teachers, missionaries, and others kept Thanksgiving in one of the upper rooms. Those who have been in Turkey can appreciate the gladness of thanksgiving on such an occasion in such a place.

January 6, 1876, the new building was occupied, under the charge of Mrs. K. P. Williams as principal, who had already labored at Harpoot and Mardin, Miss Mary M. Patrick, from Erzrûm, Miss E. C. Parsons, from Painesville, Ohio, Miss Annie Bliss, and Mrs. C. W. Tomson.[1] Many applications had been made for the admission of young girls, pointing toward a preparatory department in the future. There are now fifty-five boarders, and with the day scholars, eighty-eight in all.

The following account of the building gives a good idea of the Home. Rev. I. F. Pettibone, who superintended its erection, describes it as composed of a main building, 54 × 65 feet, with two wings, each 31 × 50 feet, in fitting proportions. The basement of the main building has a dining-room on the right, a laundry and bath-room in the center, and on the left a gymnasium. The first floor of the main building has on the left four recitation and reception-rooms, connected by folding-doors, so that they can be thrown into one apartment with the school-room, which occupies the left wing. Four rooms on the right furnish double parlors, dining-room, etc., while the right wing has rooms for music, and for the matron. The upper floor of the main building has on the left a teachers' room, dormitories, and the physician's room, while on the right are two rooms for teachers, a guest-room, and a room for the sick. The wings are occupied with dormitories. In front is the library.

From the roof the view is magnificent. Facing the west, on the left lies the Sea of Marmora the Prince's Islands, and far off snow-covered Bithynian Olympus. The slope of Scutari fills the foreground, and below, a mile distant, is the Bosphorus. Beyond that rise the domes and minarets of Stamboul, and in plain view is the new Bible House. To the right is Galata, and Pera above it; while to the north lies the Bosphorus, with its palaces, and, more beautiful because more beneficent, Robert College.

The lot of ground contains nearly an acre, surrounded by a stone wall. The front is divided into plats green with grass, and brilliant with home-like flowers. Horse chestnut, locust, and other trees adorn the grounds, and a summer-house is in the girls' garden in the rear. The basement is built of stone, and the upper walls of brick, made weather-proof by a hard English cement, the color of which softly blends with the stone trimmings.

Up to 1877, fifty-seven had been the largest number of pupils at one time.

[1] Miss Rappleye went from here to Broosa, where she established a boarding-school for Greek girls, which has been very successful. While this is going through the press, news comes of her death in Benicia, Cal., June 9, 1881. She was married to Hon. G. W. Colby, April 14.

The largest proportion are Protestant Armenians. Next come the old Armenians; then Greeks, Bulgarians, Turks, English, Americans, German, Danish, French, and Jews. The first Turkish girls came as day scholars in the autumn of 1879, and were welcomed cordially by the rest. A pleasant feature of the Home is the absence of the race prejudice so marked in Turkey. The pupils take pride in the number of nationalities represented among them.

The course of study is as follows:

First year, arithmetic, history, physiology, English, French, Turkish; Greek and Armenian are optional; compositions, and the Bible.

Second year, algebra, natural philosophy, ancient history, botany, astronomy, English, French, Turkish; the rest as before.

Third year, geometry, modern history, geology, mental philosophy, evidences of Christianity, moral science, French, Turkish, etc.

Throughout the course, vocal music, elocution, drawing, gymnastics, and embroidery.

Preparatory department, reading, writing, spelling, mental and written arithmetic as far as fractions, geography, English blackboard drawings, and, above all, the Bible.

The language of the school is English. Thus the Home is bringing woman in Turkey to her Saviour, and fitting her to go out and bring her sisters and her daughters with her to the same heavenly Friend.

Female Seminary, Harpoot.

Along with the theological seminary at Harpoot was opened a training-school for women. This was needed, not only to train up teachers and pastors' wives, but to educate the wives of the students in the seminary, as appears from the following account of a day in it, abridged from *The Romance of Missions:*[1] "In a room in the street close by are a number of hammocks. Each one contains a baby, and on bits of carpet and cushions are seated small children, attended by a motherly woman and her daughter. This is the primary department.

"At a quarter past eight A. M., the nakos, or steel bar used for a bell, sounds the signal for the pupils to assemble, and from the housetop we watch them obey the summons. The mothers hasten to deposit their children in the nursery, and hurry off the older ones to the day school. Those not so cumbered set forth more leisurely. The city girls may be seen climbing up or coming down some steep street, joining other groups here and there. A company of maturer ones, veiled by their kerchiefs, approach, some studying, and others knitting as they come. At half-past eight the door is closed, and tardy ones wait in the court till after prayers. All the rest are in their seats, with an open Bible on the desk before each. At the entrance of the teachers all rise and return their salaam. A portion of Scripture is read, followed by a brief comment and application, and after uniting in a song of praise, a blessing is implored for the day. Twenty minutes have passed — at the stroke of the bell the primary classes file off right and left to their recitation-rooms, and the first class sit

[1] *Romance of Missions* pp. 407–408.

down on the floor in a row for a Bible lesson. Arithmetic, geography, grammar, reading and spelling fill up the morning hours, with a recess, when the mothers visit the nursery. After an hour's intermission at noon, they again assemble. Writing, the catechism, and a little astronomy and moral science for the more advanced, varied by singing and spelling, fill up the time till four o'clock, when the school closes with prayer, and the women hasten home to prepare the evening meal."

A picture of "an examination," based on the same authority,[1] may suitably follow this:

October 25 the public examination took place in the chapel. During the preceding weeks there had been the usual reviews, reading and re-reading of essays, singing of new pieces of music, and all the drill so well known to teachers. On this first occasion of the kind the doors were opened only to a select few, among them pastors and helpers from a distance, and friends from the vicinity. The scholars sat on carpets in the center of the chapel, their Oriental garments slightly Europeanized, and the kerchiefs of their head-dresses partly concealing their faces. After singing and prayer, classes were examined in Bible history and geography, astronomy, moral science, the catechism, and object lessons. This was varied by singing, led by the melodeon, and the reading of essays, in clear, calm tones, on such topics as Light, Liberality, Obedience, Cleanliness, "Faithfulness in Little Things," and "The Greatest Victory." This last was the work of a little Syrian maid of Diarbekir, and portrayed the conflict between good and evil in the soul, as taking place before the eye of God, who rejoices in the victory over self. The classes appeared well. Mr. Wheeler's class in astronomy would have done credit to any school, though, for want of text-books in Armenian, the instruction had been mostly oral. The graduating class had gone through the Pentateuch during the year, in a land close to many of the scenes described, itself the cradle of the race. During the summer they had been favored with lectures on natural science and physiology, by Rev. O. P. Allen, principal of the seminary. In place of map-drawing, the pupils had learned to make "flower-pictures," and the walls were adorned with specimens of their skill in arranging leaves and blossoms, collected in their rambles over the hills. This cultivated their taste, gave them an object in walking, and would enable them to make their homes hereafter more attractive.

At the close, the diplomas were given, with a few impressive words by Mr. Wheeler. Fourteen completed the course of study, and were commissioned to go forth and teach others wherever the Master might call them. After the missionaries, some of the native pastors addressed the school. One of these rose up awkwardly, and for a moment the hearers were struck by the uncouthness of his country dialect; but soon he won all hearts by his manly and Christian utterances, contrasting woman as she had been and as she appeared on this occasion. He charged the graduates to go forth remembering their responsibility, having freely received, freely to bestow on others the same blessings, and carry on the change so happily begun. The audience lingered to admire

[1] Do., pp. 478–481.

"God's pictures," as they called them, on the walls, and went away delighted with what they had witnessed, and grateful to God for his great mercies.

Then, the school-room was long and low, on the lowest floor of a building, and with windows so high that nothing was visible save a patch of blue sky. Now, it has one of the finest school-rooms in Turkey, high-studded, airy, well-lighted, and with a glorious view of the plain below. There are also two new dormitories for teachers, and a new recitation-room. Then, pupils advanced only to square root in arithmetic, and had a poor geography, with some little old maps. Now, and for two years past, the course of study will show what improvement has been made. It occupies four years, and is as follows:

Preparatory year, Gospel of Luke, mental arithmetic, grammar as far as verbs, reading, writing, and spelling.

First year, the life of Christ, as found in the Gospels, written arithmetic, modern grammar, geography, Turkish, reading and spelling.

Second year, the history of the church in the Acts and the Epistles, arithmetic, ancient grammar and translation of the Ancient Armenian Testament, Turkish, English, and physiology.

Third year, Old Testament history, algebra, Ancient Armenian, parsing and translation of Yegheshe,[1] English, and astronomy.

Fourth year, Old Testament history continued, natural and moral science, history, English, and evidences of Christianity.

Throughout the course, vocal music, calisthenics, compositions and recitations, plain and ornamental needle-work, and drawing.

A chat in English with the head assistant, or a recitation in Peter Parley's *History*, would show their acquaintance with that language. A duet on the organ, or an English, Turkish, or Armenian song would attest their knowledge of music. Calisthenics, sketches, and fancy work, or a dinner cooked by their own hands, would also show their attainments in other directions. Most of the lessons are taught by graduates of the school. The present teachers are:

Miss Harriet Seymour, Principal.

Miss Caroline E. Bush, Associate Principal.

Misses Sara Medzadoorian, Anna Manoogian, and Anna Sarkisian.

The number of pupils in the winter of 1879–1880 was forty. A new class has just been admitted, and the first class will join their predecessors in labors to elevate their sisters all over these ancient hills and valleys of Ararat.[2]

What the Harpoot training school for girls is doing for Armenia and Mesopotamia, a like institution at Marsovan, under Miss E. Fritcher and her associates, is doing for northern Asia Minor, and would merit a separate mention had this volume only room for all that deserves commemoration. As a specimen of the fruit it produces, take the following: One of its graduates, Nectar Der Tavetian, has now been engaged for three years on an original concordance of the Bible in Modern Armenian. She has nearly completed the Old

[1] A history of their nation.

[2] See a communication from Miss C. E. Bush, in *Harpoot News*, January, 1880; also *Missionary Herald*, 1878, p. 78; and *Annual Report* of A. B. C. F. M., 1879, p. 39.

Testament, and hopes in two years more to finish the New. And this in a land where woman a few years ago was deemed incapable of education. The readers of *The Romance of Missions* will be interested to know that she is from Bardezag, one of the first girls whom Miss West selected to be educated, and has been for the last two years a teacher in the girls' school at Smyrna.

Talas is one of many fine towns at the foot of Mount Argæus.[1] Its houses are better and more costly than those of most interior towns. They are built mostly of hewn stone. Large gardens (2 in the engraving), full of fruit trees and fine English walnut trees, lie in the valley at the foot of the hill on which a part of the town is built. (No. 1) on the left of the picture, is the mission house; (3) is a new Greek church; (4) the main street; and (5) the road to Cesaræa, which lies four miles to the northwest.

The town was first occupied by missionaries in 1868, and the high school for girls was begun in 1874. The building has been erected in the grove to the right of the mission house, but does not appear in the engraving. Ninety pupils have been connected with it, from twenty-five towns. Twenty-four of them are now at the head of Christian families; thirty-five have been teachers; and forty are members of the church.

During 1879 the attendance was about fifty. Twenty-nine were at work part of each day, teaching, visiting, conducting women's prayer-meetings, or giving Bible instruction, lessons in singing, and the like. Under one of them in a neighboring town, a school of twenty scholars, in a few days, notwithstanding fierce opposition, rose to sixty; and in another town, a pupil raised the number of her scholars from twelve to forty-five. Miss Sarah A. Closson has had charge of this high school almost from the beginning, though Mrs. C. C. Bartlett was the originator of the enterprise.

Female Seminary at Aintab.

The very marked success of our mission at Aintab is seen not only in the large and flourishing churches now existing in that interior town, but also in the literary institutions that are the natural outgrowth of the spiritual work. And first a word about that work: our missionaries visited the place in 1847, though after a stay of two months Rev. T. P. Johnson was driven away with stones. Dr. A. Smith, who had previously sent a colporteur there, arrived the same month (December), and, being a physician, was able to hold his ground. In January, 1848, he organized a church of eight members. In 1855 it numbered one hundred and forty-one; and on one Sabbath nine hundred were present in the congregation, and on another thirteen hundred, though the average was not over six hundred. The first edifice *on a new site* ever allowed to be built by the Turks, for Christian worship, was erected in that year for this church. At its dedication in February, thirteen hundred and fifty people were present. In 1859 the Sabbath school numbered nearly one thousand, and in 1862 the church divided into two, with entire harmony, each body numbering one hundred and forty-seven members.

[1] Arjish Dagh.

TALAS, TURKEY.

The girls' school opened in July, 1860, with eight pupils; up to 1869 its graduates numbered twenty-eight — three fourths of them giving good evidence of piety. The number of pupils at that time was limited to thirty; and all were required to complete the course of three years. To enter, they must be thirteen years of age, and have completed primary geography and mental arithmetic, and also translated one of the Gospels from the Armenian into Armeno-Turkish, the language of the school. Boarding pupils are received from any quarter. They bring their own bedding, clothing, and books, and perform the domestic work. Board and tuition are free. Day scholars are received from Aintab only; at first they paid nothing for their board and tuition. A building was erected for the school, and dedicated with services of great interest, November 15, 1866. Miss Myra A. Proctor, the excellent principal of the school, wrote, "It was a happy day to me, almost too much to be borne calmly, when I remembered, step by step, the way in which we had been led."

The seminary is in the most populous part of the city, on the summit of a hill only two minutes' walk from the First Church. It is built of a soft white stone that turns yellow after a few years' exposure. It consists of two wings, joined by a central portion. The roofs of the wings are tiled. The central part has a flat earthen roof, and contains a dining-hall and dormitories. The east wing is two stories and a half high. Below are the apartments for the steward and his family, also a stable; above is the residence of a missionary. In the upper part of the west wing is the school-room, twenty feet square, and underneath are the kitchen and store-rooms. The whole cost was a little more than $3,000. The annual cost of a boarding pupil is about $32.[1]

In connection with the institution is a small primary school, where the pupils take practical lessons in teaching; once a week they have a miniature "teacher's institute," to discuss the best methods of teaching, and how to overcome the difficulties of teaching in Turkey — difficulties somewhat different from those encountered by teachers in America. The little school numbers thirty pupils. The charge for tuition meets its expenses, and the set of teachers is changed every three months, so that all who intend to teach may have an opportunity to learn.[2]

In 1871, ten pupils graduated, all of them hopefully pious. The public exercises were held in the Second Church. The two native assistant teachers obtained a good report for their quiet self-possession in such unwonted publicity. This year Miss Proctor proposed to the school committees of the two churches to establish an intermediate school for girls, with a female teacher. One of the committees accepted the offer; the other held back till the church committee constrained them also to accept it. The trouble was want of confidence in the ability of a young woman to govern a school. It is needless to add that the result relieved their fears.[3]

The engraving opposite page 457, gives a correct idea of Armenian women, not only in Kars, but throughout the interior of Turkey.

The seminary held a very pleasant reunion July 8, 1880, on the occasion of its twentieth anniversary. Fifty-five graduates were present, with sixty-two of

[1] *Missionary Herald*, 1869, pp. 73–76. [2] Do., 1870, p. 296. [3] Do., 1871, p. 390.

their children; also twelve who had not graduated, and forty-four now in the school. Out of the ninety-nine graduates, eighty-six were members of the church; seventy had been teachers, four having taught ten years or more. The present number of pupils is fifty-six — thirty-two in the seminary, and the rest in the preparatory course.

Several essays were read by the graduates, one on "Home Training;" another on "The Changes of the last Twenty Years, and the Prospects for the Future;" a third on "Health and its Requisites;" a fourth on "The Influence of Educated Women." A brief memorial was read of the eight graduates who had died. Many eyes were moist while listening to the last words of those who died peacefully, trusting in Christ, in the freshness of their youth. Their little children, who were present, added to the tenderness of the occasion.

The company was bright with ribbons and badges. The graduates of 1860–1870 wore green; those from 1870 to 1880 pink; and the present pupils blue. The exercises were varied with singing, accompanied by the organ. The children were entertained with calisthenics and music, and lunch was served to a hundred and eighty ladies and about fifty children.[1]

Besides a prayer-meeting in the afternoon, there was a delightful social gathering in the evening, when the husbands of twenty graduates, besides missionaries and native pastors, were present, and conversation, singing, and congratulatory addresses closed a most enjoyable day.

There is a view of the seminary in the *Missionary Herald* for 1869, p. 73, but it is not given here, because in 1877 the building was enlarged to nearly double its original size.

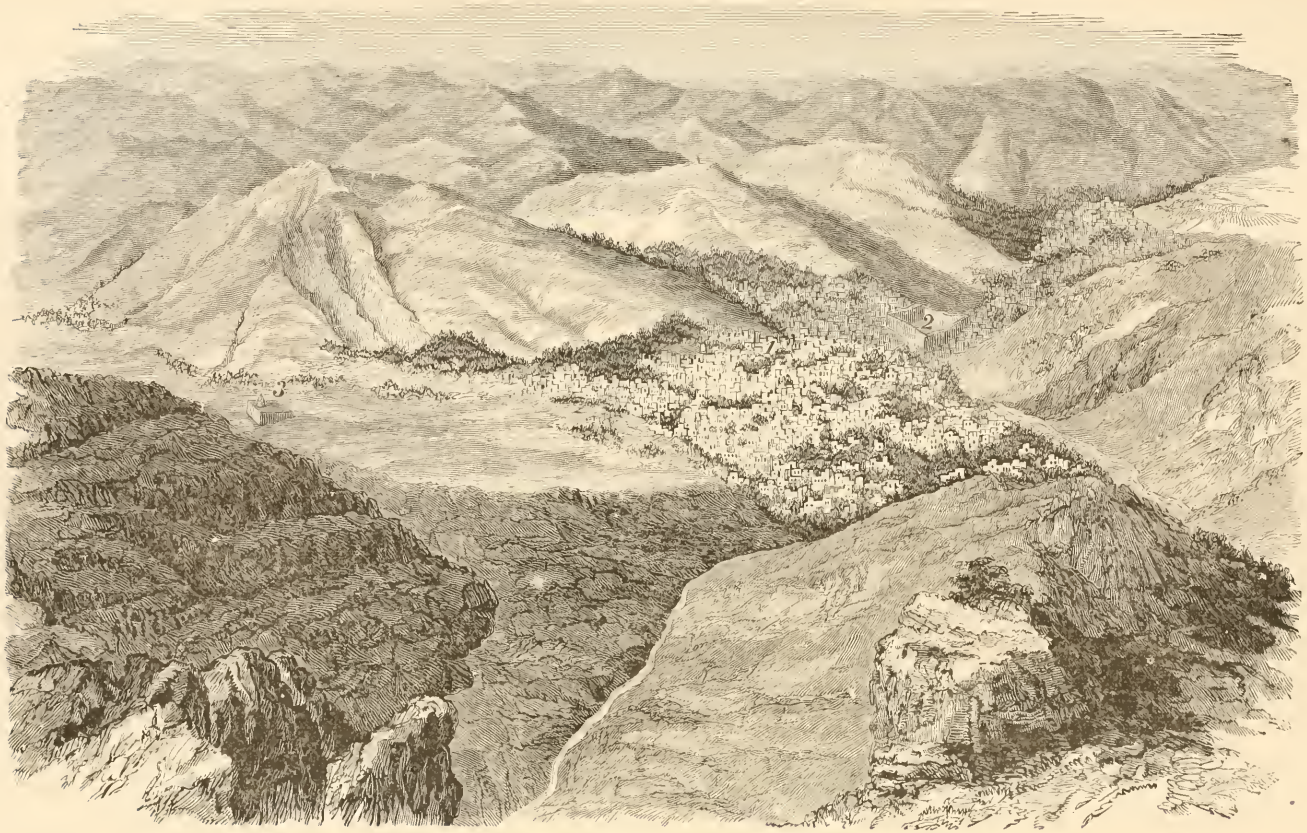
Besides Miss Proctor (1859), Mary G. Hollister (1867), Corinna Shattuck (1873), and Ellen M. Pierce (1874), have been connected with the school. Miss Pierce has been principal since 1878, and five native teachers have taught more than a year.

It may give variety to this account of schools and studies to take a peep into the summer quarters of the girls' seminary at Bitlis, under the care of Miss Ely and her sister. The school was commenced in 1866, by Mrs. Knapp, aided by others, and the Misses Ely took charge of it in 1868.

Bitlis is a straggling town of thirty thousand inhabitants, in a valley among high mountains. Some of the houses climb their steep declivities, and look down on those nearer the level of the river. The engraving gives a better idea of the location than could a labored description. The mountains rise two thousand feet above the valley, and, like other Turkish mountains, are mostly bare. Toil up their steep sides[2] for three miles, and you reach the secluded nook that forms the summer home of the seminary. The grand summits look down on it with favor, and throw their rocky walls round it for a defense. The mountain stream close by never ceases its song of welcome day or night. That huge walnut tree, shading the little terrace beneath, forms the sitting-room. Those two rooms partly dug into the hillside and partly walled with loose stones, covered with reed mats resting on poles, are the girls' dormitories,

[1] *Life and Light*, 1880, pp. 444–446.

[2] The Turks call it a yaileh, or summer pasture.



BITLIS, EASTERN TURKEY.

though that tent also shelters some of them, as well as their stores. Another spreading walnut tree, half a dozen rods away, forms the school-room. Mats spread on the ground serve for benches, and desks they dispense with. The natives write holding their paper on one hand while using the pen with the other, so that they do not miss their desks so much as we should. Then the cool, bracing air gives energy for study. There is no trouble about ventilation, and the ice-cold spring not far off furnishes most delicious water. Flowers invite to study of botany; and longer walks are taken to gather fuel. This is made up of dry weeds, thistles, roots, stray bits of wood, and the droppings of the herds, the last furnishing the principal fuel for many villages in this part of Turkey.

Here they spend the summer months, studying through the week, and holding their own meetings on the Sabbath, with now and then a visit to the neighboring village to read and talk with the women there.

So the school avoids the ophthalmia prevalent in the city during these months, and the pupils return in the autumn with minds and bodies refreshed for the studies of the winter.[1]

November 17, 1880, the school opened with twenty-four boarders and four day scholars. Two of the graduates were employed as teachers. Seven out of eight new pupils were from the villages. Their relatives were very prompt in bringing the required provisions for each pupil. One poor woman gave eighty pounds of wheat which she had begged during harvest from village to village.[2]

There is a brief account of the Christian girls' school at Ahmednagar, in the *Report of the American Marathi Mission*, for 1880.[3]

The village schools furnish the opportunity to learn to read and write, but native ideas of propriety do not allow girls of ten or twelve years of age to attend the same school with boys; hence none but very young girls attend the village school, and there is considerable pressure to secure their admission to this school, where they are by themselves. Parents who can afford it are charged one rupee a month, and one hundred and fifty rupees have thus been paid in during the past year. Girls are required to pass an examination in their studies before receiving pecuniary aid. The school had over one hundred pupils during the term, and at its close there were one hundred and twenty-four in attendance. Many of these were day scholars from 'Nagar, as they abbreviate the longer name of Ahmednagar. Those from abroad live in groups of ten or a dozen in separate houses within the compound, each group under the charge of an elderly Christian woman, who superintends the girls in their household work. Thus they form habits of industry, and are better fitted for future life in their own homes. They retain the native dress, and are taught neatly and tidily to make the best of their humble means.

Special attention is given to their religious training Besides daily morning

[1] *Life and Light*, 1880, pp. 446–447.

[2] *Missionary Herald*, 1881, p. 149. There is another graphic description of scenery on the upper waters of the Tigris, and of the *desagrèments* of traveling in Turkey, from the pen of Miss Ely, in *Life and Light*, 1881, pp. 247–253.

[3] pp. 20–22.

prayers, they attend the Sabbath school, and have Bible lessons during the week. They are also well trained in singing, so that they can join in that part of worship. Thirteen have been received into the church during the year.

The school was examined by the government educational inspector in 1879, and two hundred ninety-eight and a half rupees were given as a grant in aid, and the same grant was renewed after a like examination in 1880. Several ladies and other friends have also furnished means for scholarships and prizes.

The Oodooville Female Boarding School was founded in 1824. At first under the care of Dr. and Mrs. Winslow, it came afterwards into the charge of Dr. and Mrs. Spaulding.

A full account of this school, its origin, the obstacles it encountered, the buildings, the food and dress of the girls, their studies, and a catalogue of their names up to 1839, may be found in the *Missionary Herald*, 1841, pp. 39–43.

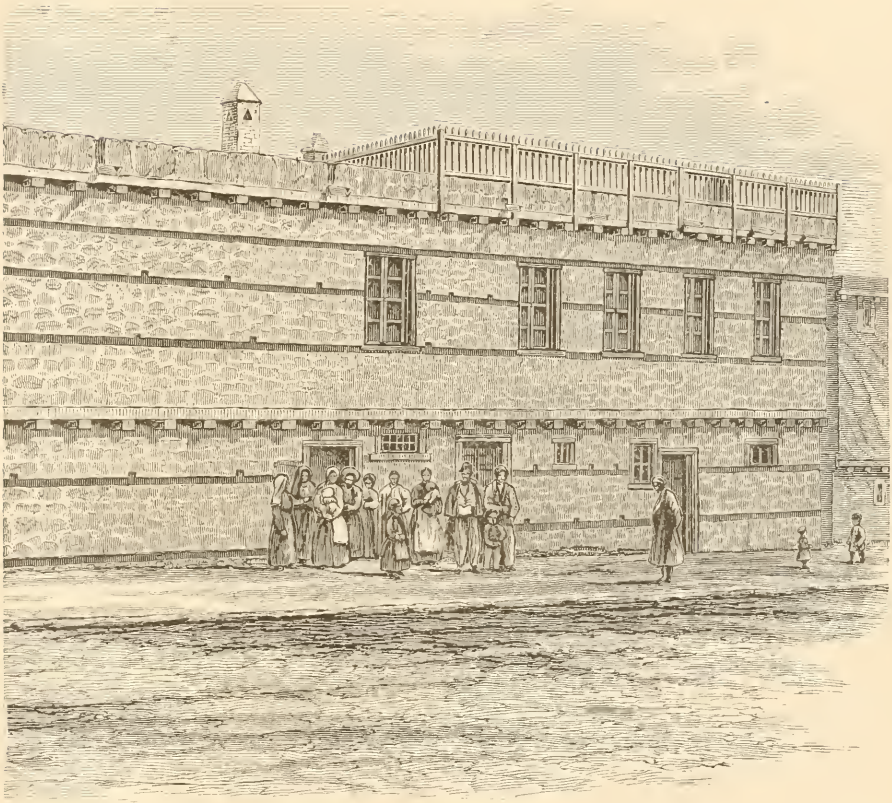
More than two hundred had studied there up to 1855, of whom one hundred and seventy-five were church members. Dr. and Mrs. Spaulding were long assisted by Miss E. Agnew, who joined the mission in 1837, and still remains at her post. The year 1874 closed its first half century, and its jubilee was celebrated with great rejoicing. The contrast between that day, when companies of fifty or sixty girls crowded to be examined for admission, many ready to pay a part, and some the whole, of their expenses, and fifty years before, when only two or three females in all Jaffna could read, and no parents could endure the disgrace of allowing their daughters to learn, was wonderful. Miss Agnew, who had then taught in the school more than a third of a century, received an address of congratulation from her former pupils, and a check for $825, to establish "The Spaulding and Agnew Fund" for the education of girls. During those fifty years, five hundred and thirty-two pupils had enjoyed the privileges of the school; of whom three hundred and eighty-five were still living.[1] Of the four hundred and sixty-two who had studied there, three hundred and seventy-five were members of the churches.[2]

The Oodoopitty Female Seminary was opened May 7, 1868, with nineteen pupils, under the care of Miss Harriet E. Townshend, and since then has been a worthy coadjutor of the older institution at Oodooville.

As this volume cannot go into like details concerning each institution, it may be well in this connection to give a list of our female seminaries. Besides the Constantinople Home, and the one at Talas, there are six others in Western Turkey, viz.: at Baghchejuk, Broosa, Sivas, Marsovan, and two at Manisa; in Central Turkey, besides one at Aintab, is another at Marash; in Eastern Turkey, at Mardin, Van, Erzrûm, and Bitlis, as well as at Harpoot; in European Turkey, at Samokov, and Monastir — nineteen in all. In India there is one each at Ahmednagar and Sholapur. There are four in the Madura mission, one each at Pulney, Mandapasalie, Dindigul, and Mâná Madura, but the principal one at Madura. Two in Ceylon; the largest one at Oodooville, and

[1] *Missionary Herald*, 1874, pp. 314–316.

[2] Catalogues of this school often appeared in the *Missionary Herald*, as in the volumes for 1853, pp. 164–165; 1855, pp. 342–344; 1856, p. 306; 1859, pp. 199, 200, etc.



GIRLS' SCHOOL AT ERZRÛM.

another at Oodoopitty. One at Fuhchau, and another at Peking, in China. In Japan, there is one each at Kioto, Osaka, and Kobe. One at Zaragoza, in Spain; two in South Africa, at Inanda and Umzumbi; and two among the Dakotas, at Santee and Sissiton agencies. Thirty-six in all, laboring for the elevation of woman, in the fields occupied by the American Board.

Nor in describing the present, with its large increase in the number, and great improvement in the outward appliances of missionary seminaries for woman, may we forget the past. The mind of the writer reverts at once to the female seminary at Oroomiah, as specially favored in its teachers. Not to mention the gifted Mrs. Grant, who laid its foundations, or the faithful Miss Rice, who so worthily carried out the work of her predecessor, the name of Fidelia Fisk deserves especial mention in any work that treats of the missionary education of woman. There may be some who have advanced further in the higher departments of science, and others who possessed rarer gifts for some one line of literary labor. But in all that goes to make up a religious educator, Miss Fisk had few equals, and it is safe to add, no superior. Mary Lyon, in many things, had no equal; but in some of the finer traits of a Christian educator Miss Fisk excelled her. Dr. Anderson was not given to rash statements, but the writer has heard him say that the mission to the Nestorians could have better afforded to lose any other member than her; nor can those present ever forget his testimony at her grave, that, in the spirit and manner of her daily life, she seemed to him the nearest approach to his ideal of our Saviour of any person that he ever knew. She seemed to do and say what he should have looked for Christ to do and say in like circumstances. And again he says: "I should find it hard to name one among the thousand and more missionaries of the Board whom I have personally known, who has a brighter record." Nestorian women were especially favored in having such an one to mold their characters. Her life-work is described so fully in *Woman and her Saviour in Persia*, and in her memoir by her cousin, Dr. D. T. Fiske, that it is not needful to repeat the description here.

This chapter gives only a selection from the literary institutions in connection with the American Board, not a complete account of them.

Among the Zulus, Mrs. Edwards' boarding school at Lindley, with fifty pupils, and the normal school and seminary at Adams, under the care of Rev. W. Ireland, with a like number, ten of them pursuing a theological course, deserve grateful mention.

Indeed, none of our missions can prosper in the conversion of men, without creating a demand at once for institutions to train up pastors for the churches, teachers for the schools, and intelligent men and women for every position in life.

XVIII.

MEDICAL SCIENCE.

THE East has been called the cradle of medical science. The elaborate treatises of Avicenna[1] on pathology, *materia medica*, theory and practice, and natural science, form the basis of Oriental practice in Turkey to-day. He was born in Kharmeithen, in Bokhara, 370 A. H. (about 992 A. D.), was a most diligent student, and possessed an intellect of rare excellence. He was physician successively to the princes of Tabaristan, Hamadan, and Ispahan. He died at Hamadan, 428 A. H. He wrote one hundred treatises on physics and metaphysics. Dr. Van Dyck gives the table of contents of his *Canon of Medicine* (Rome, 1593).[2]

In India, inoculation was known long before it was practised in Europe. So was lithotomy, and couching for cataract.[3]

Yet to-day, both in India and Western Asia, medicine is at a very low ebb. In Syria, till quite recently, a poor tradesman or mechanic could buy a lancet, or grind an old knife into the shape of one, and set up as a doctor, with no knowledge of medicine, and sometimes not even of reading. The theory of medicine, where there is any, is based on the old pathology of the four humors: blood, bile, phlegm, and black bile; to which is added a fifth, wind. If a sick man does not eat it is supposed that he will die; and so indigestible mixtures of animal and vegetable food are forced down his throat to make him strong. Neither in India nor Western Asia is there any true knowledge of anatomy. One tolerably well read in Arabic medical books, insisted that the liver filled the left side of the abdomen. One, whose patient was dying of inflammation of the bowels, called it "an opening of the lungs." Hernia and hydrocele are "wind of the scrotum," lumbago "wind of the kidneys," and hemorrhoids "wind of the rectum."[4] Charms are relied on for the cure of disease; *e. g.*, the patella or trachea of a wolf, hung from the neck, is a cure for the mumps, and a written amulet is very efficacious, especially if eaten by the patient. The common aphtha of children is sought to be cured by cauterizing the poor little

[1] El Rais Abu 'Ali El-Husein Ibn Abdullah Ibn Sina is his name in full.

[2] Dr. Van Dyck, in *Journal of the American Oriental Society*, Vol. I, p. 563-567

[3] D. O. Allen's *India*, p. 457.

[4] *Journal American Oriental Society*, Vol. I, p. 578.

one on the crown of the head. The Bezoar stone is a favorite cure for epilepsy or hysteria. Barbers are the regular dentists, and break teeth quite as often as they extract them. In ophthalmia, irritating powders are sprinkled on the conjunctiva. In injuries from falls, the patient is wrapped in a sheepskin warm from the animal, and, if practicable, must drink a decoction of some member of the body of an Egyptian mummy. The Arabs have a superstitious dread of all surgical operations, and prefer death to undergoing them; a preference that was amply justified by the ignorance of those who performed them in the past.

The Chinese class the flying squirrel among birds, and hold that the skin of one held in the hand during labor makes parturition easy. Their great medical work, *Pun Tsau*, says that the pure white horse is the best for medicine, and that to eat the flesh of a black horse, without wine, causes death. The heart of a white horse, hog, cow, or hen, when dried and rasped into arrack, cures forgetfulness. The night eyes of a horse[1] enable him to see in the night, and also cure the toothache. The ashes of a skull, taken in water, cure insomnia if the patient uses another skull for a pillow.[2]

D. W. Osgood, M.D., in his reports of the Fuhchau Medical Missionary Hospital, adds to our knowledge of Chinese medicine. He says the bones of the tiger are eagerly sought as tonics, and beef bones are often sold under that name. Consumption is treated with the human placenta boiled an hour or two in an earthen urinal that has been in constant use for years, and either made into pills or eaten in mass. As the purring of a cat is regarded by them as a kind of asthma, feline fæces are a favorite remedy for that disease. For various ulcers they give what they call the five poisons, to expel the malignant poison that causes the local trouble. The recipe is: Serpents, pulverized, one ounce; wasps and their nests, half an ounce; centipedes three ounces; scorpions six, and toads ten ounces; grind thoroughly, mix with honey, and make into pills. Itch is to be cured by swallowing small toads alive. The skin and fæces of the elephant, and many more such things find a place in their *materia medica*. A powder prepared from the scrapings of old commodes is given to women after child-birth, to prevent colds.

The following prescription was printed and circulated by benevolent Chinese during the cholera of 1878: "When one has the cholera, you should rub his spine with an earthen spoon that has been soaked in tea oil, till small black spots appear, then puncture these with a needle down to the bone; the poisonous blood will thus be removed. Dip your hands in cold water, and rub the arms in front of each elbow, also the popliteal spaces, till they are black; then apply a burning lamp-wick. Give the following to an adult: One cup of salt, heated in an iron spoon over a slow fire, and mixed with one cup of ginger juice and an equal amount of boy's urine and cold water; the mixture to be given in hot water. Whoever circulates this will obtain boundless merit." Doubtless!

There are no examining boards in China, and nothing to prevent any one from hanging out his sign. There are no dissections, and no distinction made between veins and arteries, nerves and tendons. The lungs are said to be six-lobed, and attached to the third cervical vertebra. The trachea is two inches

[1] *i. e.*, the warts above the knees.

[2] *Middle Kingdom*, Vol. I, p. 293.

wide and one foot long. The heart has seven apertures and three hairs. The liver has seven lobes — it causes the eyes to move — and contains the soul. The gall bladder is the seat of courage. The rectum is a straight tube, two feet and eight inches long; and the bladder below the kidneys is filled from the small intestines. The midwives are old women, who close the doors and windows against fresh air, forbid bathing for several days, and give ginger tea to prevent colds — practices which often cause puerperal fever.

It is appalling to think of the barbarities of surgeons in heathen countries, and the aggravations of human suffering caused by the charlatanry of native doctors. The missionary physicians have not only personally relieved much suffering; they have educated many skillful doctors from among the people, and introduced the latest improvements of medical science. They have not only contributed to medical literature in the countries where they practice, but have added new facts to medical science at home.

In Western Asia they have contributed elaborate reports on the diseases of the country, as modified by climate and modes of life. Quotations have just been made from an article by Dr. C. V. A. Van Dyck, of Syria, of thirty-two pages, in the *Journal* of our Oriental Society, on "The Present Condition of the Medical Profession in Syria."

A writer in the *British Quarterly*[1] says of Dr. Asahel Grant: "He was continually thronged with patients, both Moslem and Christian. Children brought their aged parents, and mothers their little ones. Those blind with ophthalmia were led by the hand.[2] Those relieved from pain kissed his feet, or even his shoes at the door. He gained great repute by the removal of cataracts." Among his patients were Kûrdish chiefs, Georgian princes, Persian nobles, and members of the royal family. In the great peril of his first journey in Kûrdistan his fame as a physician had preceded him, and kept him in safety where the life of another could not have been assured for an hour.

"In 1846, a missionary had been stoned from Aintab. In 1852 Dr. Henry Lobdell was treated there with the highest respect, because he was a physician. Several hundreds, both Moslems and Christians, signed a petition for him to remain, and gray-haired men wept when assured that he must go; scarcely had he set foot in Mosul when he was besieged by patients of every class. A hundred, high and low, crowded his room at once. The people were astonished at his diagnosis. He wrote to a friend: 'The native doctors often blister the whole head and cauterize every other part of the body with a hot iron. I am confident that I do twice as much good with my knowledge of medicine as I could without it.'"

The unusual zeal to retain Dr. Lobdell at Aintab is explained by the impression made there by Dr. Azariah Smith, who died in 1851. The same writer in the *British Quarterly* says of him: "His contributions to the American Oriental Society, and to various medical journals, show his wide and accurate scholarship; while his reputation to-day in Northern Syria proves his success as a

[1] January, 1878, p. 27.

[2] The writer remembers how often their eyes were swollen to the size of an egg, and when the good doctor drew the eyelids apart the pus flowed out like thick cream.

practitioner, and that he had won the confidence and love of the people. Arriving at Aintab when the excitement against Americans was at its height, he entirely turned the tide of hostile public sentiment, and was the principal instrument in establishing (and giving character to) the Central Turkey mission, in some respects the most successful in Turkey."

No one who knew Dr. Smith can ever forget him. Without much of the emotional in his nature, he was the very impersonation of consecration to God. The writer remembers the very tone and attitude in which he once said: "If the Lord should tell me to take a small hammer and go out and pound with it a great granite rock, I should have nothing to do but to go on till he bade me stop; nor would it belong to me to ask the reason for the command, or to be anxious about results. My whole duty would consist in doing as he required, because he required it;" and these words expressed the spirit of his life.

"Dr. Henry S. West, a graduate of Yale College, after eighteen years of faithful service, has recently died (1876). He was of small stature, nervous temperament, and genial manners — a man who loved his profession passionately, and devoted his life to doing good. His modesty was proverbial. He had the medical care of many missionary families, located hundreds of miles apart, and all his journeys were on horseback.. Unaided, he educated nineteen young physicians so thoroughly, that when one of them was examined by the faculty of the government medical college, they expressed the indebtedness of the government to Dr. West, for educating so many physicians, and doing it so well. He had to practice in all departments of medicine and surgery. Patients came from all parts of Asia Minor, often through much danger and suffering; for, though containing more than ten millions of people, that region was almost without educated physicians. He received large fees, but all went to build churches for the people. On a journey soon after his arrival, he stopped at a rude village for the night, and was told of a man suffering in the adjoining khan from strangulated hernia. The patient had suffered for hours, was exhausted, and the parts much swollen. Dr. West did not know the language, and had no help but a servant ready to faint at the sight of blood. There was no light but a small candle, yet he did not hesitate. He performed the operation alone, and with complete success. At the time of his death he had performed fourteen hundred operations on the eyes, one hundred and fifty in lithotomy, and thirteen in strangulated hernia; and in his last sickness, mosques, and Armenian as well as Protestant churches, echoed to prayers for his recovery. Thousands followed his body to the grave. He raised the standard of medical practice throughout Asia Minor, and in him the empire lost a public benefactor." [1]

After describing some other operations by Prof. H. Lee Norris, of Aintab (for the medical department of the college there has two professors), the writer adds: "We reluctantly leave this interesting part of our subject, feeling that we have done scant justice to the immense amount of hard, and often self-denying, labors of missionary physicians in Turkey, most of whom laid down their lives in the work. They were modest men, content to toil quietly and long. They rest from their labors, but their works do follow them."

[1] *British Quarterly Review*, 1878, p. 28, abridged.

Rev. Andrew T. Pratt, M.D., was another beloved physician in Turkey. Converted when but ten years of age, his desire to preach the Gospel led him to commence study for the ministry. Going to Turkey in 1852, his first station was at Aintab; but he removed to Aleppo in 1856, and to Marash in 1859. Besides his medical practice, he educated five or six Armenians as physicians. But his remarkable love for the Turkish language, and mastery of its peculiar forms and idioms, led to his selection as the associate of Dr. E. Riggs in the revision of the Armeno-Turkish Bible. The last sheets of the New Testament were in the press when he was called home in December, 1872. His Turkish grammar is also a memorial of his devotion to that language. His fine poetic taste and fondness for music admirably fitted him to be a writer of hymns, and many of the best lyrics in the Armeno-Turkish hymn-book are from his pen. Through them, as well as through the pages of the Turkish New Testament, he being dead yet speaketh.[1]

In India, besides his labors as physician, Dr. John Scudder began the work of educating native physicians in Madras. Dr. Samuel F. Green succeeded Dr. Nathan Ward in Ceylon, and was very successful in raising up nearly one hundred well educated physicians there. At the dispensaries of Ceylon, Madura, and Dindigul, in 1878, forty thousand cases were treated. At Dindigul, also, Dr. Edward Chester has thoroughly organized the work.

Among missionary ladies, Mrs. S. B. Capron has begun medical labors with marked success at Madura, Miss E. K. Ogden, M.D., at Sholapur, and Miss S. F. Norris, M.D., at Bombay. Mrs. Leonard, also, of Marsovan, in Turkey, though not an educated physician, by her successful treatment of the sick has been the means of bringing many of the wealthier Armenians to the knowledge of Christ, and even opened a way for the truth into Turkish families of the highest rank.[2]

Many a superstition has received its death-blow from our missionary physicians; many errors in native practice have been corrected; and a good beginning made in providing standard medical works for India. Rev. H. J. Bruce prepared a work on anatomy.[3] S. F. Green, M.D., wrote thirty-two treatises in Tamil, among them a volume on Obstetrics, pp. 258, 12mo; on Pharmacopæia, pp. 500, 8vo; on Surgery, pp. 504, 8vo; on Medical Vocabulary and Medical Jurisprudence, pp. 161; on Anatomy, pp. 838, 8vo; on Physiology, pp. 700, 8vo; a *School Anatomy, Physiology*, etc., pp. 204, 12mo; *Practice of Medicine*, pp. 917, 8vo; *Mother and Child*, pp. 44, 18mo; *The Soul's Abode*, pp. 44; *Secret Vice*, pp. 32; and on Chemistry, pp. 516, 8vo; besides works on the Hand, Eye, Ear, Foot, etc. At home he has published in the *New York Medical Journal* an article on Tamil Obstetrics, and another on Tamil Surgery. Dr. E. C. Scudder has contributed articles to periodicals in India. Missionary physicians have sent home specimens in medical botany, and in anatomy, to specialists in those departments, and have communicated facts from their foreign practice to throw light on points debated among us. At the same time, where they reside, they correct false systems, which inflict needless pain and

[1] *Missionary Herald*, 1873, pp. 75-77.

[2] *Romance of Missions*, pp. 284, 709.

[3] Bombay, 1878, pp. 340, 8vo. Marathi and English.

often hasten death instead of restoring health. They also teach the sacredness of human life. It is not strange, therefore, that the natives esteem them very highly in love for their work's sake.

At the Shanghai conference, in 1877, it was stated that in China native doctors were not only ignorant of anatomy, but also of the nature of disease and the properties of medicines, while they violate all rules of hygiene; and Rev. W. A. P. Martin, president of the imperial university,[1] said that it was not easy to estimate the value of the books prepared by missionary physicians, or of the scientific and other periodicals to which missionaries contributed. There was such a growing demand for scientific books that he could not spend a night in an interior city but some of the best citizens applied for them; and others present corroborated his testimony.

The first medical missionary in China was Dr. Peter Parker, sent out by the American Board. In 1835 he opened an ophthalmic hospital in Canton. The mission advanced the necessary funds, and within a year it was repaid by the foreign community. The medical missionary society was now formed, and Howqua, a native hong merchant, gave the free use of a house worth $600 rent, for twenty years.[2] Things, however, were quite different at the outset. Then, Dr. Parker had great difficulty in securing a building, and when it was ready no patients came the first day. On the second, a woman courageously trusted herself in the hands of the foreigner. Next day half a dozen came, encouraged by her success, and soon the street was full. So anxious were they to secure his services that even women of the better class staid all night in the street, so as to secure an early admission. Long lines of sedan-chairs almost choked up the narrow lane. Great men with their attendants waited their turn to see the foreign doctor. As many as a thousand were waiting at once, and there was danger that people would be injured by the pressure. Some came from a great distance. Sometimes blind people from a far-off village clubbed together to charter a boat to Canton, and then waited four or five days after their arrival, till there was a vacancy for new patients. One gentleman came a thousand miles. Magistrates and high officials were among the patients. One commissioner, who had been cured, sent a tablet inscribed: "Under your skillful hand (from the winter of disease) the spring (of health) returns." Another wrote: "Let the merits of Jesus, the Saviour of men, be proclaimed throughout the world."

Dr. Parker published frequent reports, and sent home sketches of some special operations, now in the medical museum of Yale College. Ill health compelled him to resign the work in 1855. Missionary hospitals have been established at Macao, Hong Kong, and all the open ports, by the missionaries of other societies, as well as our own. Not less than a million cases had been treated previous to 1861, and the work has greatly increased since then. Dr. H. D. Porter treats several thousand cases annually in North China. Fourteen missionary hospitals are now in operation in China.

It has been pleasant to see how the sick trusted the missionary physician. One was told that in spite of every precaution the operation might prove fatal,

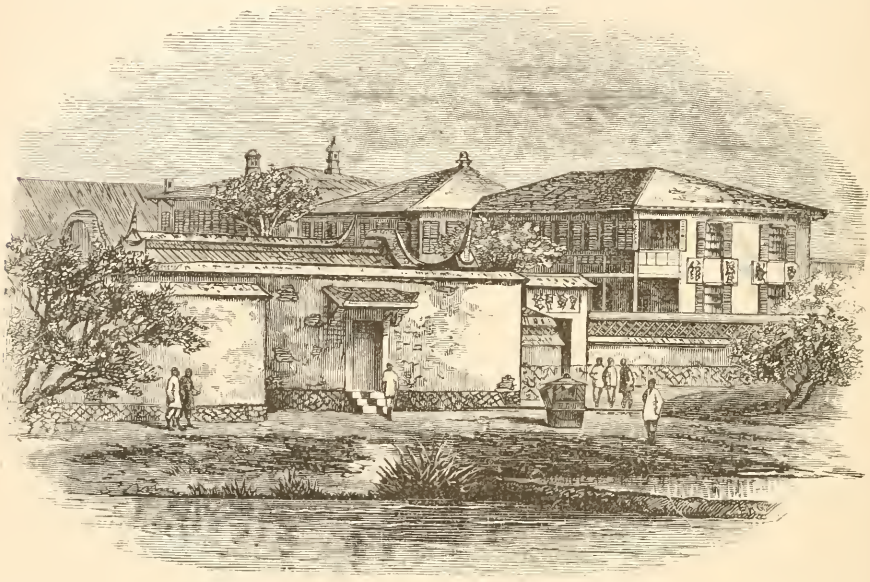
[1] The Tung Wan Kwan.

[2] Dr. S. Wells Williams, in *Presbyterian Review*, 1881, p. 34.

but he interrupted the doctor with the remark, "I have known you too long to require anything now to inspire my confidence." The operation was successful. The Chinese are generally quiet patients, and seem to care little for the pain.

Rev. C. Hartwell, *Missionary Herald*, 1878, pp. 243–245, shows how Western science, in other departments as well as in medicine, is rapidly overcoming Chinese prejudice.

The reports of the Fuhchau Medical Missionary Hospital furnish a more full account of the labors of D. W. Osgood, M.D., which may be tabulated thus:



MEDICAL MISSIONARY HOSPITAL, FUHCHAU.

Years.	Patients.	Expenses.	Local Subscriptions.	Chinese Subscriptions.	Total.
1873	7,925	$838.12	$1,084.00	$209.00	$1,293.00
1874	——	——	——	——	——
1875	8,253	892.40	1,005 00	172.00	1,177.00
1876	5,134 [1]	741.53	50.00 and fees $31	——	81 00
1877	6,203	878.00	1,064.00	233.00	1,297.00
1878	7,288	1,451.52	10.00	300.00	310.00
1879	9,578	794.12	1,620.00	475.17	2,095.17
1880	7,838	1,212.42	25.00	——	——

These figures will not balance, for other sources of income are not here given. The whole number of different patients from the beginning, excluding from the count all subsequent visits of the same patient, was fifty-one thousand eight hundred and thirty-eight. These have represented nearly every class, and also nearly every province in China. The building, of which a view is here subjoined, was finished May 1, 1878. It contains eleven rooms, one for

[1] This year Miss S. Trask, M.D., relieved him of many of his female patients.

paying patients, seven wards for others, two rooms for the assistants, and an operating room. It accommodates from fifty to sixty patients. Three rooms for cooking are in another building. The entire cost of all was $2,270.35.

The table of diseases treated is very suggestive. Cutaneous diseases are by far the most numerous, owing to the uncleanliness of the Chinese and their dread of cold water, externally at least. They count up eleven thousand nine hundred and ninety-two in the eight years, and ulcers four thousand three hundred and twenty-six. He mentions two thousand eight hundred and eighty-four cases of diseases of the mouth, teeth, and lips. Rheumatism comes next, furnishing two thousand eight hundred and twenty cases. Diseases of the digestive system two thousand three hundred and ninety-five; conjunctivitis, two thousand one hundred and thirteen; bronchitis, one thousand eight hundred and twelve; human parasites form one item numbering six hundred and four cases. Syphilis furnishes eight hundred and fifty-three, and sodomy seventy-one cases; injuries caused by beatings one thousand four hundred and twenty-two, and by bites sixty-seven. These include bites by dogs, which native doctors treat by drawing a circle round the wound and writing "tiger" in it, because the tiger is more than a match for the dog; but some were caused by human teeth in fighting. One military officer was bitten by a thief whom he was arresting, so that he seemed for several days about to lose his hand; and a woman had one hand entirely denuded of the muscles, so that the bones were connected only by their ligaments, as the result of a bite in a family quarrel. The suppuration in such wounds is unusually great. Dr. Osgood dissents from Dr. Williams' statement in *The Middle Kingdom*,[1] that "the practice of compressing the feet is more inconvenient than dangerous, for few or none come to hospitals with ailments caused by it," and says that every year he has cases of ulcers resulting from the arrest of circulation in the foot by that unnatural process,[2] and that the appearance of the foot when stripped of its bandages is thoroughly disgusting. In his report for 1873 he gives a drawing of a fibroid tumor of the neck before and after treatment; also of a case of excision of the eye. While he had one hundred and four cases of elephantiasis in the leg, he had sixty-two of the same disease in the scrotum, generally proceeding from ague, and the swelling so great that in twenty-six operations he removed three hundred and eighty-four pounds from that part of the body. One case he mentions weighing forty-five pounds, measuring three feet in circumference.

While this hospital practice opened a way for the Gospel, his labors in connection with opium were more fruitful in this respect, for, as the Chinese are very bitter against foreigners for introducing the drug, which they look on as an unmitigated curse, they are correspondingly grateful for any alleviation of the evil. As early as 1876 Dr. Osgood cured one hundred and seven smokers of opium. At first they were required to deposit a dollar on entering, which was refunded if they remained till discharged. After the opium asylum was opened two dollars were charged and one refunded. This excluded vagabonds and helped their purpose to remain and conquer the habit. Dr. Osgood stopped the use of the drug *in toto* from the first; used quinine, tonics, a good

[1] Vol. II, p. 38.

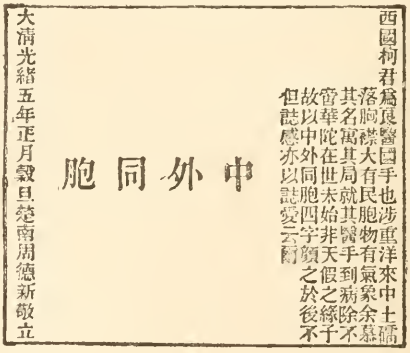
[2] *Report* for 1875, p. 5; 1880, p. 3.

diet, and in some cases stimulants. Chloral hydrate was used for two or three nights, if needed; so also bromide of potassia, iron, etc. The appetite ceased generally in about a week, and though impaired vitality, or even disease, resulted from the habit, yet more than sixty per cent. of the cures were permanent. Very few women or children use the drug. Of boatmen, chair coolies, and the like, perhaps one half use it, while in some farming communities very few are addicted to the practice, though the Chinese say that "opium shops outnumber rice shops," and universally condemn its use. Dr. Osgood never heard a Chinaman advocate the practice. He gives tables showing the occupation of his opium patients, their ages, the amount they used daily, and the time they had been addicted to it. The opium hospital was opened in 1878–1879, as a separate and self-supporting institution, and in 1880 fifteen hundred cases had been treated in it with good success.

Among the patients at the hospital was a military officer, who had been an opium smoker. He was severely sick when he came, but after a while was cured. He was so grateful that he set up a tablet in the hospital, with an inscription, of which we here give an exact copy, only very much smaller than the original. Here is the translation of it, the title being the four words in largest type:

"*The Chinese and Foreign (are as) Own Brothers.*

"The Honorable Osgood from the West, esteemed an excellent physician, of skill in the land, crossed an ocean to China; of mind clear and expansive, with a manifest spirit of brotherly regard toward the people. I dwell affectionately on his name. When residing in the asylum and submitting to medical treatment, the approach of his hand expelled disease as when (the genius) Hwa-to was in the world. This truly was a fortune bestowed by Heaven! I therefore inscribe four words, 'Chung Wai T'ung Pao,' not only as a memorial of gratitude, but also of love.



A MEMORIAL TABLET.

"Great Pure Dynasty, Kwangsü, 5th year, 1st moon, on a felicitous day, Chiu Taik Seng of Chu-nang respectfully erects this tablet."

Since the above was written, news has come of the death of Dr. Osgood at the sanitarium near Fuhchau, August 17, 1880. The next number of *The Fuhchau Herald* was clad in mourning, and the main article was an account of him and his work, written by an English banker who had watched his labors and learned to appreciate them. After describing his medical work,[1] he adds: "It would not be strange if many of his fifty thousand patients should echo those words, first heard near the cross, 'He saved others, himself he cannot save.'

[1] See *Missionary Herald*, 1880, pp. 489–490.

"For four years, every hour that he could spare from his other duties has been devoted to the translation of a standard work on anatomy, and it is very much to the strain occasioned by his unremitting labors on this book that his early death is to be attributed. The work will soon be issued in five volumes, illustrated by numerous almost perfect plates. The finishing touches were given only the day before he left home. Too great value cannot be assigned to this work, the first of its kind in China. It may safely be predicted that for many years to come it will remain a standard work, and conduce to the improvement of medical knowledge in this vast empire."

Rev. J. E. Walker once remarked to a native helper that $10,000 could not hire a physician to do as Dr. Osgood did. "No, indeed," was the reply, "nor several tens. Why, all his patients were those that had been given up by our native doctors."[1]

In Japan, Drs. J. C. Berry, M. L. Gordon, W. Taylor, and A. H. Adams are doing a good work on a much larger scale. Dr. Berry has had access to all parts of the empire, even to the extreme north. He has obtained important concessions from the government. The privilege of a dissecting-room was granted to him for investigating the pathology of a disease not known in this country, and subjects were provided from deceased criminals. At the opening of the building provided by the government, he delivered an address, showing among other things that the Christian religion favored the advance of science. A hundred and fifty physicians were present, and so favorable was the impression that several took manuscript copies of the address.

In 1874 he had charge of five hospitals supported in different places by the people, and the government even appropriated Buddhist temples to that purpose.

In January, 1875, a medical society, composed of twenty-four Japanese and two Americans, was organized, which Dr. A. H. Adams reported as meeting twice a month with increasing interest.

That same year Dr. Berry asked permission to visit the prisons, in order to learn their system of prison discipline and suggest useful reforms; the request was not only granted, but his report to the government, suggesting separate cells, improved sanitary arrangements, and other reforms, was published at its expense, and orders issued to put these reforms in practice. This is the more remarkable, as Gospel ideas were set forth as the only true basis of such improvements.

In 1877 he opened a medical school at Kobe.

May 29, 1879, he writes concerning the hospital under his charge at Okayama: "In the medical branch I can expect nothing more than I have received. Yesterday every obnoxious official was removed, and men of my selection appointed in their places. To-day my new hospital staff, embracing six of the best physicians in the city, called on me in a body."

Rev. T. S. Williamson, M.D., gives a short account of medicine among the Dakotas.[2] With them the priest and physician are one, as they believe that all

[1] *Missionary Herald*, 1881, p. 69.

[2] *Gospel Among the Dakotas*, pp. 435-450.

diseases are caused by evil spirits; the thing is to find out what spirit caused the disease, and then cast him out. Both are done by incantations, accompanied with much noise and imposture. They also use simples, mostly roots and herbs, but ascribe the effect to the spirit and not to any property of the drug. One in ten of the men, and one in thirty of the women, are doctors. Dr. Williamson only knew one who gave medicine without conjuring. Some of them are excellent nurses, and do good in that way. They practice bleeding with a sharp flint, and also cupping. For a purgative they rely on the root of a tall species of euphorbium; and to reduce swellings they use chiefly blue root, a species of pyrethrum. They use for an anæsthetic the fumes of calamus and some other substances burned together. They gladly avail themselves of the services of educated physicians. Even the medicine men themselves do this, though they do what they can to dissuade others from doing the same.

At present the Board sustains fourteen educated physicians, who are not only opening doors for the entrance of the Gospel, but elevating the standard of medical practice, and so diminishing the amount of human suffering, and increasing the sum of human enjoyment in every country where they reside.

The writer does not know at what time other societies began to employ missionary physicians, but the American Board sent out Thomas Holman, M.D., to the Sandwich Islands in 1819, and W. W. Pride, M.D., to the Choctaws the same year. Four others were sent to the Sandwich Islands: Dr. A. Blatchly in 1822, Dr. G. P. Judd in 1827, Dr. A. Chapin in 1831, and Dr. S. L. Andrews in 1836. After 1831 there was a great increase in the number sent forth, twelve being commissioned between that and 1837, for different parts of the world. At first the Board seems to have employed them with special reference to the missionaries, but afterwards more for the sake of their usefulness among the people where they lived.

XIX.

COMMERCE AND THE ARTS.

SOME would have us rely on commerce for the uplifting of degraded peoples. Doubtless commerce has its place among the influences that work toward that result. It is the enemy of idleness. It stimulates to effort. It promotes thrift. It excites ambition to better one's condition. It creates an activity favorable for the development of many virtues. But commerce alone, without the living power of Christianity to neutralize its evils, does not elevate. The history of our missions furnishes some striking lessons on this point.

In October, 1825, Rev. W. Richards and family were laboring alone on the island of Maui, in the North Pacific. The English whale-ship "Daniel," Captain Buckle, arrived, and finding that the native women did not visit the ship as formerly, the crew went in a body and complained to the missionary. He reasoned with them; but in vain. They rushed into the house, raging and threatening to destroy his property, burn his dwelling, and kill himself and family. Mr. Richards told them: "We came here to devote our lives to the salvation of men. We are ready for life or for death, but we will not consent to undo the work of God." His wife, also, though sick at the time, and unprotected in the midst of her children, expressed her readiness to share the fate of her husband, but would not accept life upon their terms. Such unexpected firmness restrained their violence for the moment, but not their abuse. Next day the captain, in reply to a note from the missionary, promised peace on condition of his acceding to the demands of the crew. All this while the captain had a native woman on board, for whom he had paid $160, and compelled to remain with him through the cruise. But the lonely missionary was immovable; and when on the morrow the crew came with a black flag, knives, and pistols, and pressed their way to the door, Sandwich Island clubs, vigorously wielded by indignant natives, drove the cowardly mob away, though a strong guard had to be kept night and day to protect the missionary from *Christian* sailors.

Will it be believed that, two years later, the British consul at Honolulu, in official dress, along with Captain Buckle, some weak-kneed chiefs, and several foreign merchants, strode into the hall of council and demanded of Kaahumanu that Mr. Richards be punished because he had written an account of these proceedings to the American Board at Boston?

In the following January, the United States schooner "Dolphin," under

command of Lieutenant John Percival — *stet opprobrii nomen* — arrived at Honolulu, and her commander took decided ground against the law that forbade the transgression of the seventh commandment; and on the Lord's Day, February 26, a company of sailors from the schooner entered the house of the sick chief, with knives and clubs, and demanded its repeal. They were driven out after they had broken the windows; and when they overtook the missionary on his way to his own home, only the prompt protection of the natives saved him and his family from personal injury, while an officer of the American navy reiterated in the strongest terms his determination that the law should be repealed. Some complain that, notwithstanding missionary labors, the Hawaiian race is doomed to extinction. How long would it have survived such treatment? We are not surprised, however much we may be grieved, at the conduct of the drunken crew of a whaler, composed, as such crews often are, of the offscourings of a seaport; but that a *naval* officer should so far forget himself and the reputation of his flag, shows how deep-rooted and wide-spread was the mischief thus wrought among helpless heathen. Small hopes of the world's regeneration if it must come through such channels.[1] It is owing to the missionaries that the Hawaiian race has been saved from the destruction that otherwise had come to it from Christian lands.

This, however, is only one side of a world-wide evil.

Take another side, as described by Rev. William Walker,[2] of West Africa. After speaking of discouragements in his work, he adds: Worse than these things are the streams of fire poured out from Christian lands and rolling on incessantly. The people sink beneath the flood, and there remains but a sea of salt surrounded by a land of desolation. We shudder at the Italian assassin who first induces his victim to abjure his God on the promise of life, and then plunges the dagger to his heart, but so-called Christian commerce commits the same atrocities every day on the coast of Africa.

Travelers write of the coast climate as consuming the tribes that come down from the interior; but the chief cause of their wasting away must be looked for in cargoes coming from Christian seaports. Superstition demands its victims, but Mammon offers ever-smoking holocausts. The missionary toils at the very entrance of Gehenna.

Rev. William Anderson, a Scotch missionary in old Calabar, writes: "But for the British rum-trade, long ere this our native membership might have been numbered by hundreds instead of tens." Another writes even more sharply; and what can be more severe than to charge on British Christians the annihilation of nine tenths of the labor of one of their ablest missions? And it is even worse at the Gaboon.

Dr. W. A. P. Martin, President of the Tungwen College, Peking, in a paper entitled "The Renaissance of China,"[3] quotes from an essay published in a

[1] Bingham's *Sandwich Islands*, p. 274; Dibble's *Sandwich Islands*, pp. 217–226; *Missionary Herald*, 1826, pp. 208, 244; 1827, pp. 38–43; 1828, pp. 275–281.

[2] *Annual Report*, 1870, p. 6.

[3] See *The Chinese, their Education, Philosophy, and Letters*, 12mo, pp. 319, Harper & Brothers, New York, 1881.

Chinese newspaper by Chang-lu-seng, now vice-minister to Japan, a nobleman of wealth, who has written one volume on engineering and another on chemistry. In discussing the advantages and disadvantages of foreign intercourse, he says: "Commencing with the last years of the Ming dynasty, we opened the seaports of Kwang-tung to foreign trade, doing a profitable business in teas and silks, receiving in return woolen and cotton fabrics, as well as clocks, watches, mirrors, and other luxuries; but opium came in also, and its poisonous streams have penetrated to the core of the Flowery Land." To the advantage derived from the purchase of foreign arms, from the assistance of foreigners in suppressing the late rebellion, and to the protection which they extend over the open ports, he does ample justice. Still he concludes that the "advantages derived from foreign commerce are not sufficient to make amends for the evils it occasioned. But the benefits which we derive from the teachings of the missionaries are more than we can enumerate." He then recapitulates the scientific publications of missionaries, from those of the Jesuits two centuries ago, to those of Protestants today, and closes the catalogue with the remark: "All these are the works of missionaries. They are well adapted to augment the knowledge and quicken the intellect of China. Their influence on our future will be unbounded." And though he has little personal sympathy with Christianity, he adds: "China is much given to idolatry, which is to us a source of wasteful and foolish practices. Now Christianity teaches men to renounce idol worship, in conformity with the maxim of Confucius, that he who sins against Heaven will pray in vain to any other. Should we attend to these instructions, our women would cease to frequent the temples, and we should waste no more money in idolatrous processions. Monasteries would be turned into private residences, and their yellow-capped inmates would not fleece the people by their deceptions. Their services and charms would be laughed at, and this would be a great gain."[1]

If we were to undertake to determine the relations of missions to commerce in India, there are so many other elements to be considered in the problem, that it might be difficult to reach a satisfactory solution. The influence of the British dominion in that country would introduce uncertainty into all our conclusions. So the opium trade complicates the matter very much in China. But in the islands of the Pacific we can trace much more clearly the influence of missions on commerce, and feel more sure of our results. True, the slave-trade, under a more euphonious name, has created disturbance there, also; but that did not begin until after the relations of missions to commerce in those islands were fully established and plainly manifest.

Missions found those islands possessed of an admirable climate, and also of much fruitful soil, but the people were slothful; there was nothing to stimulate exertion, and the oppression of their rulers tended to hinder all energy and enterprise. So they were content to do little more than consume the spontaneous productions of the soil, with such fish as they could readily procure from the sea.

Missions, by bringing the Gospel into connection with mind and heart,

[1] *Missionary Herald*, 1881, p. 239.

developed man in his earthly relations. He woke up to see that he was naked and needed clothing. The supply of this want necessitated commerce, and the need of buying clothing stimulated production at home in order to procure the wherewith to purchase the commodities of other lands. It was the influence of missions, also, that in like manner led to the erection of comfortable homes, and furnishing them with convenient furniture; for clothing required places for safe-keeping. and the new-clad household felt the need of a corresponding advance in other things; they could no longer sit on the ground, and chairs involved tables, and tables cupboards, and other things as well.

Their rulers, also, under the same divine influences, laid aside their savage violence, and voluntarily introduced constitutional modes of government; and these again, as they involved expense, also stimulated to modes of meeting it that would be permanent, and not repress the energy and activity on which they depended for success. Hence commerce arose and flourished under the stimulus provided by the Gospel.

True, there were beginnings of commerce where there were no missions; but nothing to compare with those islands where the missionary work developed the capacities of man for this life, as well as for the life to come.

A solitary trader might settle in some island and collect a little of its natural products, but the immorality which he too often fostered, and the untruthfulness, in which he also set the example, repressed all enterprise, and made progress an impossibility, if it did not provoke reprisals that involved commerce and trader in a common destruction.

Missions, on the other hand, constantly diminished the dangers that from the first grew out of heathen ferocity and treachery. The isles of the Pacific furnish abundant illustration of this. Multitudes there have been the victims of savage violence; but wherever missionaries go, safety and kind treatment take the place of peril and slaughter. Look on two pictures in connection with our mission to Micronesia.

October 5, 1835, the whaler "Awashonks" was standing off and on one of the Marshall Islands. While one watch was below and three men aloft, the natives on board, at a preconcerted signal, snatched the whale-spades from the rack, and instantly the captain, mate, and second mate were slain, with four of the crew. The third mate fired up through the binnacle so as to kill the chief, who had taken the place of the man at the wheel, and when he fell his people fled, else the entire crew had shared the fate of the "Waverley," the "Harriet," the "Glencoe," and the "Sea Nymph," where none were left to tell how their shipmates perished. The brother of the chief got away, badly wounded; but afterward, under missionary influence, became a Christian, and once saved the "Morning Star" and all on board from destruction. After a godly and peaceable life he fell on sleep, and his people became as noted for their hospitality to strangers, as they had been for barbarity.[1] "In places once noted for piracy, hundreds of thousands of dollars have been sent home, saved from wrecks by Christian natives."[2]

Lawless pirates from Peru had carried off a number of the natives from the

[1] Dr. A. C. Thompson, in *Missionary Herald*, 1880, p. 92.

[2] *These for Those*, p. 205.

Marquesas Islands as slaves. A chief whose son was among the victims vowed to kill and eat the first white man that fell into his hands. Mr. Whalon, the first mate of an American whaler, happened to be that man, and Kekela, a missionary from the Sandwich Islands, rescued him from the revengeful father, though to do it he had to give up his new six-oared boat which he had just received from Boston.[1] President Lincoln heard of it, and sent a valuable present to Kekela and his associates in the rescue. The Sandwich Islander wrote a letter in reply, in which occurs the following: "As to this friendly deed of mine, its seed was brought from your great land, by certain of your countrymen who had received the love of God. It was planted in Hawaii, and I brought it here that these dark regions might receive the root of all that is good and true, which is love.

"How shall I repay your great kindness to me? Thus David asked of Jonathan, and thus I ask of you, the President of the United States. This is my only payment — that which I have received of the Lord — 'love.' May the love of the Lord Jesus Christ abound towards you till the end of this terrible war in your land."

Before the letter reached Washington President Lincoln had fallen by the hand of the assassin.[2]

Missions promote commerce by correcting the dishonesty of heathen tribes. Rev. J. L. Wilson tells how some tribes in Western Africa overreach white men who come to buy their ivory. One man pretends to have heard of an unusually large tooth at some distance in the interior. Others corroborate the story, and enlarge on its great value. The desire of the trader to get it is cunningly fostered, till he offers a certain sum in advance to secure it from his competitors. But the owner of it wants a great price, so the white trader pays what he thinks will allow him a safe margin. Weeks after, some greedy chief on the road must have a present to let the tooth pass through his territory. This also is given, only to provoke fresh demands, till the poor trader desperately pays, merely to save the investment already made. When at length he receives the much coveted prize he finds it a very ordinary affair, not at all above the average; and if he could know the whole story he would find that the tooth was in the possession of his sharp African friend when he first began the negotiation.[3]

Such cunning duplicity checked commerce and threatened to destroy it altogether in that region, till the conversion of the natives in the vicinity began to affect their business dealings, and languishing commerce revived.

Missions also promote commerce by creating a demand for the comforts of civilization. As long as the savage remains a heathen he is content with his condition, comfortless as it appears to us. Only when a new life transforms his inner being does he desire the improvement of his outward lot.

The martyr of Erromanga[4] found in his missionary experience that till a savage people feel the power of the Gospel they do not desire civilization; but

[1] A chief afterwards ransomed the boat with a gun and some other articles.
[2] *Story of the Morning Star*, p. 64-66. [3] *Western Africa*, pp. 247-256. [4] Rev. J. Williams.

that invariably awakens such desire. European houses stood for years in Tahiti, but no native moved to copy them. Missionaries' wives wore English clothing, but the native women preferred their own semi-nudity till they felt the power of a new life from above; then, even the poorest wanted a gown, a bonnet, and a shawl, that they might appear like Christian women.

Sir Bartle Frere, who certainly had large opportunities for observation, both in India and Africa, says: "Civilization cannot precede Christianity. The only successful way of dealing with all races is to teach them the Gospel in the simplest manner possible."

Simon Van der Stell, governor of the Cape colony in South Africa, sent a Hottentot boy to school clothed in a military dress, with hat bordered with gold, wig, silk stockings, and a sword. He learned Dutch, Portuguese, and other languages, and on returning from India, where he had spent several years, he threw his fine clothes into a chest, donned his carosse,[1] and taking nothing besides but his sword and cravat, went back to his people in the bush; for, as Rev. Lewis Grout, who tells the story,[2] well remarks: "It takes more than fine clothes and foreign tongues to make a Christian."

Rev. James C. Bryant, of South Africa, wrote in 1849,[3] "of fourteen young men who have left my employ within two years, one has since been converted at another station, and of course clothes himself; the other thirteen have gone back to their heathen friends, and go as naked as ever. These are painful facts, and show how futile is the attempt to civilize these people without first converting them. Wash a pig, shut him up in a parlor, and you may keep him clean for a while; but as soon as he is free, he will return to his wallowing in the mire. Change him into a lamb and he will at once abandon that filthy habit. To think of civilizing the heathen without converting them, is about as wise as to think of transforming swine into lambs merely by washing and putting on them a fleece of wool. The Gospel is the grand remedy God has provided to lift up the degraded."

Rev. Lewis Grout[4] says that the heathen Zulus select patches of land for cultivation along the edges and angles of streams, or on the bushy side of the summit of a hillock, where the women plant, weed, and harvest the crop. The mother[5] binds her babe on her back in a goat skin, balances her basket of seed on her head, and with her heavy pick on her shoulder — for it weighs from eight to ten pounds — goes forth to work. Sometimes she carries the babe all day long while she toils under a burning sun. Of course a new order of things is introduced among those who become Christians. An open, level field, fit for the plow, is preferred to the narrow, precipitous patches which must be dug by hand. But among the heathen portion of the people the poor woman with her pick and basket still serves as plow and cart, ox and horse.

The woman who is sold for oxen must toil in this way, but the oxen for which she is sold are never yoked. They are only eaten by their lazy masters. The ox-yoke belongs to Christian civilization.

Those who become Christians buy plows and wagons, build houses, and

[1] Skin robe.
[2] *Zulu Land*, p. 53.
[3] *Missionary Herald*, p. 414.
[4] *Zulu Land*, p. 99.
[5] See engraving, p. 203.

purchase furniture. As far back as 1865, five hundred American plows were sold in Natal alone, and there was a growing demand for cloth, for saddles and harnesses, for books and maps; while the heathen Zulus were marked out from the rest by their nakedness, their filthy kraals, and utter lack of comforts and conveniences.

After long years of toil and hope deferred among the Bechuanas, one of the first tokens for good that cheered the heart of Robert Moffat was the rows of candles that appeared hanging around the native huts. Till then the negroes had laughed at the missionaries for wasting their fat meat by burning it; but now that they were learning to read the Word of God, they felt the need of candles for themselves. Up to that period the outer darkness of an African village after sunset had been a dreary emblem of the moral darkness within.

Rev. J. H. Seelye, D.D., President of Amherst College, in writing of our own Indians, says: "Civilization is in a most important sense a gift rather than an acquisition. Men do not gain it except as stimulated thereto by some incitement from above themselves. The savage does not labor for the gratifications of civilized life, since these he does not desire. His labors and desires are both dependent on some spiritual gift which quickens his aspirations, and calls forth his toil. Unless he has some help from without, some light and life from above to illumine and inspire him, the savage remains a savage; and without this, all the blandishments of the civilization with which he might be brought in contact could no more win him to a better state, than all the light and warmth of the sun could woo a desert into a fertile field."

When English missionaries went to the Indians in Canada, they took with them skilled laborers to teach them how to labor, and by providing them at first with comfortable houses, clothing, and food, hoped to call forth their endeavors to perpetuate these comforts. But the Indian would not work, and preferred his wigwam and skins, his raw flesh and filth, to the cleanliness and convenience of a civilized home; and it was only as Christian influences transformed him inwardly, that he was led to work for the improvement of his outward condition. The same is true everywhere; civilization does not reproduce itself. It must first be kindled, and can then only be kept alive by a power genuinely Christian.[1]

The English *Journal of the Society of Arts*[2] endorses this same truth, stating that at the Edendale mission station "seventy monogamous Zulus live in houses like Europeans, with furniture in, and gardens round them. They have a school and stone church, built by the men themselves, while three hundred thousand of the same race live within the frontiers of Natal, having been nearly half a century in contact with English civilization, yet without a bed to lie on, a chair to sit on, table, or domestic implement of any kind."

A still more striking fact is mentioned on page 646 of the same journal: "In the colony of Lagos in Western Africa, some of the natives have acquired wealth, and desire to imitate English habits. One man built himself an elegant house, furnished after the most approved modern fashion; yet neither he

[1] *The Congregationalist*, January 12, 1881.

[2] June 13, 1879, p. 648.

nor his family occupy it, but live in an adjoining hovel." Would that have been the case had the man and his family been Christianized? Yet to-day some even there are Christians. This city was originally built as a stronghold of the slave-trade, and for generations its name was associated with all the horrors of that infamous traffic; but now the landmark which guides vessels into this "Liverpool of Africa" is the spire of a Christian church, and the annual exports amount to $2,000,000. Take away the religion represented by the church and would the exports continue?

Dr. J. L. Wilson explains the indisposition of the people of Congo to adopt the habits of civilization under Papists, by the fact that they were unconverted.[1] He says something more is needed to civilize heathen than merely to set before them specimens of civilized life. The idea is unphilosophical, for it implies that the only thing in the way of their improvement is ignorance, whereas there is inherent in heathenism an aversion to those activities which alone can secure prosperity. We look in vain for any upward tendencies in pagans till their moral and intellectual natures are awakened; and as Popery has no power to do this, we are not surprised to find so little trace of civilization in Congo.

So in the partial civilization of Turkey. While the neglecters of the Bible continue on in their gloomy and comfortless abodes; chairs and tables, books and book-cases, Yankee clocks and glass windows, mark the homes of those who love the truth. Within sixteen years nearly five hundred sets of irons for fanning mills have been ordered from a single firm in New York, through our missionaries at Harpoot, and the native carpenters have been taught to supply the woodwork, so that through the Gospel the fields in that part of Turkey are better tilled and their produce better cared for.[2]

The New York *Herald* published the despatch of the Hon. E. F. Noyes, our ambassador at the court of France, to the secretary of state, referred to on p. 379, and adds: "Our merchants, manufacturers, and steamship owners will find in it many valuable suggestions. Mr. Noyes brings out strikingly the significant fact that there is in that part of the world a population nearly as large as our own, entirely friendly, with whom we may establish the closest commercial relations. We can there find an immense market, if we have only the enterprise and sagacity to cultivate it. Turkey and Egypt are well disposed towards us, the American missionaries having sown among them the seeds of friendship. The subject is one of supreme importance, and it is to be hoped that the excellent recommendations of Mr. Noyes will not be lost."

Rev. Henry Marden, of Marash, says of Central Turkey:[3] "The Oriental, when left to himself, is entirely satisfied with the customs of his ancestors, and aspires to nothing better. No contact with Western civilization has ever roused him from his apathy, but when his heart is warmed into life by Gospel truth, his mind awakes, and he wants a clock, a book, a glass window, and a flour-mill. Almost every steamer that leaves New York for the Levant brings sewing machines, watches, carpenters' tools, cabinet organs, or other appliances of Christian civilization, in response to native orders that never would have been sent but for the open Bible; and now, as you pick your way along the narrow

[1] *Western Africa*, p. 327. [2] *Missionary Herald*, 1881, p. 86. [3] Do., 1880, p. 48.

street through the noisy crowd of men, camels, donkeys, and dogs, the click of an American sewing machine, or the sweet strains of an American organ, often greet your ear, like the voice of an old friend from home."

The entire cost of the Sandwich Islands mission up to 1869 was $1,220,000.[1] The imports of the islands in 1863 were $1,175,493.25,[2] and the exports were $1,025,852.74. The custom house receipts in the same year were $122,752.68, and the number of merchantmen entered at the custom house, ninety-eight, averaging five hundred tons each, besides one hundred and two whaling vessels. Recent tables give the value of exports to the islands from San Francisco alone, for 1867–1869, as $4,702,029. Take one third of this, as the exports for one year, and we have the startling fact, that a group of islands of no commercial importance whatever when the Gospel was carried there sixty years ago, without commerce, or any material for commerce, except the sandalwood of their mountains, now pay in one year at a single American port more money by $367,343 than the entire cost of their Christianization during these sixty years.[3] Let that single fact tell whether missions promote commerce.

The testimony of more recent facts, obtained from government records at Washington, is not less noteworthy. During the year ending June 30, 1879, the trade between Boston and these islands amounted to $125,355. The profits on this at twelve and a half per cent. would be $15,669.37½. San Francisco last year had a trade with the islands of $5,053,013, the profits on which, at the same rate, would be $631,626.62½. The whole trade between the United States and these islands last year amounted to $5,546,116, against less than $2,000,000 in 1871; and its profits at the same per cent. were $693,264.50. So that the whole amount expended by the Board on the islands from 1820 to 1880 would be canceled in less than two years by the profits on the present commerce.

The trade of the United States with Micronesia amounted in 1879 to $5,534,367, with profits as before of $691,796; and during that year the missions there cost only $16,975; so that for one dollar paid out by the Board, commerce, from trade created by those missions, reaped $40.75.[4]

While dealing with money matters it may be well to refer to some careful calculations of Rev. T. S. Williamson, M.D., mentioned in Dr. Warren's *These for Those*, pp. 220–231, which show that the removal of the Dakotas to their new reservation on the Missouri was really owing to the instruction they had received from missionaries, saving the government $210,000, which is $140,705 more than the entire cost of all the missions to that people. Again: It cost for the support of the heathen Dakotas $120.00 per head; but two thousand two hundred Christian Dakotas were supported for seven years at a cost of only $120,000; which at the rate of the cost of the heathen Dakotas would have been $1,848,000; involving a saving of $1,728,000. So much economy is there in first Christianizing the Indian and then letting him labor for his own support, as he will do when brought under the divine influence of Christian

[1] Dr. Anderson's *Sandwich Islands*, p. 340.
[2] Dr. Anderson's *Hawaiian Islands*, p. 251.
[3] *Missionary Herald*, 1880, p. 84.
[4] Rev. G. Hood, in the *Foreign Missionary*, 1881, p. 391.

motives, carrying others along with him by the power of his good example and success.

The following facts, culled from the communication of a correspondent in the New York *Times* of September 5, 1879, may show how missions promote the interests of commerce. He had been visiting the Dakotas at the Santee agency in Nebraska, and says: "The houses are well built, and many of them furnished in good taste. The people sleep on mattresses and bedsteads, sit on chairs, and eat with knives, forks and spoons from white stone ware. Some have clocks and framed engravings hanging on the walls, and all have good stoves and kitchen ware. The women, especially the young ladies, have a fondness for Saratoga trunks, some having three or four of them. In several houses we found baby coaches of recent styles, in which Indian mothers lull their babies to sleep instead of strapping them to a board and hanging them to a limb of a tree.

"Both sexes and all ages wear the clothing of civilization. It is easy to distinguish those who have attended schools, for they are always neat and clean in person and dress. Many of them dress in good taste, and tie their long black tresses with bright ribbons."

True, it may seem to degrade this bright picture of missionary success, when, instead of dwelling on the elevation of character, and the addition made to human well-being, we look at it only in the light of the market opened up to Christendom; but the reader must remember that this volume views the whole subject of missions, not merely in the light of its eternal spiritual results, but also in that of its secular benefits.

MECHANIC ARTS.

There are those who attribute the progress of the present century to its unprecedented skill in the mechanical arts, even more than to its advance in science. We believe that for both we are indebted primarily to the Gospel. That quickens the human mind, and stimulates man's inventive powers. But those who think so much of mechanical arts will ask what missionaries have done in this direction?

In reply we might point to savage nations lifted out of barbarism into civilization, with all its appliances — not carried bodily among them, as a garland is placed upon a marble statue, there to wither and decay, but made to grow out of the renovated national life, as leaves and blossoms from the living tree. But here we labor under the disadvantage of being unable to transport our reader to heathen lands, so that he can see with his own eyes the need of renovation, and then witness the change wrought by the grace of Christ; for no one who has not seen it, can appreciate the utter and helpless degradation of a barbarous tribe without the Gospel. The dweller in a Christian land in his thoughts carries over the civilization which he sees at home to the heathen land, and cannot form any idea of it as it was. Hence it is impossible for him to appreciate the change. Tell him that a tribe of Zulus, who had been naked savages, among whom woman was a slave, and treated with revolting cruelty, her forced labor the chief source of the means of living, now wear clothes, treat

The Lord's Prayer, in Arabic.

ٱلصَّلٰوةُ ٱلرَّبَّانِيَّةُ

أَبَانَا ٱلَّذِي فِي ٱلسَّمٰوَاتِ. لِيَتَقَدَّسِ ٱسْمُكَ. لِيَأْتِ مَلَكُوتُكَ.
لِتَكُنْ مَشِيئَتُكَ كَمَا فِي ٱلسَّمَاءِ كَذٰلِكَ عَلَى ٱلْأَرْضِ. خُبْزَنَا
كَفَافَنَا أَعْطِنَا ٱلْيَوْمَ. وَٱغْفِرْ لَنَا ذُنُوبَنَا كَمَا نَغْفِرُ نَحْنُ أَيْضًا
لِلْمُذْنِبِينَ إِلَيْنَا. وَلَا تُدْخِلْنَا فِي تَجْرِبَةٍ. لٰكِنْ نَجِّنَا مِنَ ٱلشِّرِّيرِ.
لِأَنَّ لَكَ ٱلْمُلْكَ وَٱلْقُوَّةَ وَٱلْمَجْدَ إِلَى ٱلْأَبَدِ. آمِينَ

الصلوة الربَّانيَّة

ابانا الذي في السموات. ليتقدس اسمك. ليأتِ ملكوتك.
لتكن مشيئتك كما في السماء كذلك على الارض. خبزنا كفافنا
اعطنا اليوم. واغفر لنا ذنوبنا كما نغفر نحن ايضاً للمذنبين الينا.
ولا تدخلنا في تجربةٍ. لكن نجّنا من الشرير. لأن لك الملك والقوّة
والمجد الى الابد. آمين

الصلوة الربانية

ابانا الذي في السموات. ليتقدس اسمك. ليأتِ ملكوتك. لتكن مشيئتك. كما في
السماء كذلك على الارض. خبزنا كفافنا اعطنا اليوم. واغفر لنا ذنوبنا كما نغفر نحن ايضاً
للمذنبين الينا. ولا تدخلنا في تجربةٍ. لكن نجنا من الشرير. لان لك الملك والقوة والمجد الى
الابد. آمين

woman with kindness and respect, and have plows and wagons, houses and gardens, and he only points to the inferiority of those plows and wagons to the same articles at home. He cannot see the superiority of things as they are there now above what they were before.

So, instead of dwelling on this general view, let us look at some details.

The invention of printing in China preceded our own by five centuries, Fungtau having invented the process of block printing in 933 A. D., while Gutenberg, in Germany, followed after in 1436; but it was reserved for Rev. Samuel Dyer, a missionary of the London Society at Penang (from 1829 to 1843), to substitute the use of metallic types for the cumbrous wooden blocks that had been used for nine hundred years.

These metallic types were greatly improved and extended by Mr. Richard Cole, who had charge of the American Presbyterian press at Hong Kong. In the year 1851 he had increased the assortment of each of two fonts to about four thousand seven hundred characters. William Gamble, manager of the Presbyterian press at Shanghai, also made a beautiful font of small pica size by electrotyping, bringing the assortment of each to nearly seven thousand characters, at a very cheap rate. The native newspaper press owes its existence and activity to the introduction of movable types by missionaries. Wooden blocks are now discarded at the government press in Peking.[1]

It is something to have had two such printers in China as Dr. S. Wells Williams, subsequently secretary of legation to our ambassador, and P. R. Hunt, who was in Peking from 1868 till his death in 1878. He had previously been at Madras from 1840 till 1866. When he left there a valuable gold watch and chain were presented to him by native Christians and others, who made grateful mention of their "deep sense of the benefits conferred on Southern India by his elegant editions of Tamil classical works, which had raised printing there to a place among the fine arts; and especially by his accurate and beautiful editions of the Tamil Bible, which had called forth the gratitude and admiration of all native Christians."

Mr. E. Breath made great improvements in Syriac types, and delighted the Nestorians by printed letters made in exact conformity to those of their best manuscripts.

Dr. Eli Smith made a collection of the best specimens of Arabic caligraphy, and from the most admired of these, aided by Mr. Homan Hallock, produced a type which Arabs pronounce the beau ideal of beauty. So much admired is it that the Dominican convent at Mosul at once applied for a font. So did the German Oriental presses at Leipsic, and the Jesuits at Beirût. Its fame extends from Monrovia, in Western Africa, to Peking, in China. Specimens of three different fonts are here subjoined, each of them being a copy of the Lord's Prayer. The upper one is vowelled, *i. e.*, has the vowels added to the consonants above and below the lines, the same mark having a different sound according to its location. The middle one is the same font without vowels, and the lower one a smaller size, yet retaining the beautiful proportions of the larger font. Mr. Hallock also greatly improved the Greek and Armenian type

[1] Dr. S. Wells Williams, in *Presbyterian Review*, 1881, pp. 37, 38.

used at Smyrna, and the improvement is so in accordance with the Greek taste that when the American Bible Society asked the opinion of Dr. E. E. Bliss about American fonts of Greek type, he candidly expressed the opinion that they would not suit the Greek people.[1]

The fonts of Dewanagari type, used for Sanskrit, Marathi, and Hindi; of Modi type — the cursive letter of Marathi clerks; and of Gujerati, all of them cut by Mr. Thomas Graham, while in connection with the American mission press, are the finest in existence.[2]

The great work of the learned Dr. John Wilson, of Bombay, was his volume on *The Parsi Religion, as contained in the Zend-Avesta, Unfolded, Refuted, and Contrasted with Christianity*, and it was printed by the American mission press of Bombay, from the first Zend and Pahlawi types cast in the East. The Rev. D. O. Allen, D.D., sent forth from the foundry of that press the first metal types for the regeneration of Western India, as Carey, Marshman, and Ward had done long before at Serampore for Eastern India and China.[3]

When the persecution in 1839–1849 prevented the students in Bebek Seminary either getting help from others or helping themselves, Dr. Hamlin, their teacher, a genuine Yankee, set up a sheet-iron workshop in the basement of the seminary building. He taught others the art of gilding, and of assaying ores. Some of them developed rare genius in chemistry, and one especially, to whom a noted manufacturing chemist made a most tempting offer, that opened the way to wealth and honor, declined it for the sake of teaching his countrymen, on a salary of $12 a month and finding himself. Another he taught to manufacture camphene. Then, as Mehemet II had given every foreign nationality at Constantinople the right of having its own bakery, Dr. Hamlin took advantage of this to establish a steam flour mill and bakery, and the amusing methods by which he foiled the Turks in their usual attempts to hinder it, and overcame other obstacles growing out of his own inexperience in such matters, he has told us most graphically in his interesting volume, *Among the Turks*.[4] His supplying the British hospital with bread; his getting $30,000 worth of flour from a Greek grain dealer on his own simple promise to pay, so great was the reputation of missionaries for honesty; and the way in which he conquered British official arrogance and incompetence, are all set forth in the same volume to the life.[5]

There is no mention made of it in missionary reports, nevertheless it is true, that for improvements in the ordinary mechanic arts, as well as for spiritual good, heathen peoples are indebted to the personal labor and teaching of the missionary. The writer well remembers that in Mosul we had no chairs, nor any native mechanics capable of making them, and as all imported articles were brought on the backs of horses and mules, hundreds of miles over very

[1] *Bible Society Record*, 1880, p. 58.
[2] Letter of Rev. S. B. Fairbanks, D.D.
[3] *Life of John Wilson*, by G. Smith, LL.D., p. 132.
[4] *Among the Turks*, pp. 218–225.
[5] Do., pp. 228–240.

MISSION CHURCH AT PASUMALAI.

rough roads, such fragile goods stood small chance of ever reaching their destination whole. But Dr. Grant was equal to the emergency; and partly by his own handiwork, partly by showing an ingenious mechanic how to do it, he succeeded in producing a very creditable imitation of our mahogany chairs in the walnut wood of the region, which have served as a pattern ever since, and introduced a new element into domestic comfort and convenience in Mosul. The same was true of tables, which, in our form at least, were unknown to the natives; for a table so high as ours would be somewhat out of reach to one seated on the floor, or on the low mukkaad of the region.

No small part of the usefulness of missionaries among savage tribes, after spiritual life has begun to manifest itself, consists in showing their converts a more excellent way in the line of material improvement.

The buildings erected by our missionaries for their higher schools, of which several specimens have already been given in these pages, bear witness to their promotion of the mechanic arts; and so do their church edifices, of which an illustration is given on the opposite page, from Pasumalai, in Madura.[1]

[1] *Missionary Herald*, 1874, p. 33.

XX.

WINES OF THE BIBLE.

Some good men, intensely moved by the evils of intemperance, and distressed by the impiety of those who wrest certain Scriptures to their own destruction, have been led to affirm that two kinds of wine were spoken of in Scripture: one good and commendable, the other poisonous and pernicious; and have made the process of fermentation the dividing line between the two.

Others, equally zealous for the removal of drunkenness, but more dispassionate in their views of the means to attain this result, saw that this theory did violence to holy Scripture, since the word[1] which these affirm always denotes the destructive wine is used to mark that which was offered to the Lord, laid up in the sanctuary, and used in connection with sacrifice, to say nothing of its use as a symbol of the blessings of the Gospel.

In this wide divergence of views at home, it was to be expected that missionaries located in Bible lands, being intelligent observers of facts, familiar with the original languages of Scripture, and devoted to the promotion of human well-being, would make some valuable contributions towards a correct knowledge of the facts, and their testimony will now be adduced as one of the contributions of the missionary work to human knowledge.

The first to say anything on this subject was the Rev. W. G. Schauffler, in the *Biblical Repository* for 1836, pp. 286–308. In that article he mentions first, all the arguments known to him in favor of our Lord's having used *must*, or syrup, in the institution of the Eucharist, and then states the reasons which lead him to hold that fermented wine was used. He goes into various philological arguments; but it is only important to know his conclusions and any facts to which he bears witness.

One important fact, to which, as a missionary to the Jews, and one well acquainted with Rabbinical literature, he was unusually qualified to bear witness, is this: The fruit of the vine, *pri ha gephen*, is the name given in the *Talmud*, section Berakoth, Perek six, to the *wine* on which a blessing was pronounced at the Passover, and this name is given to it in the blessing itself. He says: "The undeviating practice of the synagogue in all places of their dis-

[1] Yayin.

persion, bears witness that in the cup was fermented wine, and no syrup water." At the Passover, every Jew, however poor, must have four cups of fermented wine. Again: "As to the contents of the cup, there is but one opinion existing, and there has been but one until now. It was *yayin*, and this, according to the standing rule of the synagogue, was fermented wine." So, also, he says, we "look in vain throughout the body of the church for difference in doctrine or practice as to the contents of the cup at the Lord's Supper. The nature of the bread has been in dispute; the time of observing the ordinance, one day before the Passover, or on it; the propriety of giving the cup to the laity; the frequency and import of the rite; but as to the original contents of the cup there has been no diversity of opinion." He also calls attention to the fact that grape syrup is not mentioned in the Bible. There is not even a Hebrew name for it, and the only Chaldean term, "carena," is from the Latin or Greek.

The next missionary who has written on the subject was the Rev. Justin Perkins, D.D., of Oroomiah. In his *Residence of Eight Years in Persia*, p. 236, published in 1843, he says:

"Inquiries have often been proposed to me on the subject of the wines of Persia. The facts in the case are these: The juice of the grape is used there in three ways. When simply expressed it is called sweet; *i. e.*, sweet liquor. It is not drank in that state, nor regarded as fit for use, any more than new unsettled cider at the press in America; nor is it even called wine till it is fermented.

"A second, and very extensive use of the juice of the grape, is the syrup, made from boiling it from (in) this sweet state, which resembles our molasses, and is used in the same way, for sweetening, but is never used as a drink. This is, in fact, neither more nor less than Oriental molasses.

"The third use of the juice of the grape is the distillation of it into arrack, or Asiatic brandy. The wines of Persia are in general much lighter than those of Europe, but still they are always intoxicating. In making these statements, I throw down no gauntlet for controversy on the much-vexed wine question, but wish simply to communicate information. Were I to hazard the expression of personal feeling and opinion on the general subject, it would be that of the deepest regret for any approximation in the tendency of the age to the removal of the sacred landmarks of Scripture institutions."

This is certainly a very modest, clear, and trustworthy statement of simple facts.

The next witness is Rev. Eli Smith, D.D., a resident in Syria from February 19, 1827, till his death, January 11, 1857, and one of the most careful observers and accurate writers at home or abroad. He wrote an article on "The Wines of Lebanon" for the *Bibliotheca Sacra*.[1] His information was obtained from seven districts of Lebanon, extending from Tripoli nearly to Sidon; *i. e.*, from one end of Lebanon to the other.

He says the methods of making wine there are numerous; but may be reduced to three: (1) The simple juice of the grape is fermented without desic-

[1] *Bibliotheca Sacra*, 1846, pp. 385-389.

cation or boiling. Little is made in this way, and it will not keep except in favorable localities. That made in Bhamdûn, by treading the grapes in baskets, will not keep a year. Yet it possesses rather strong intoxicating powers. (2) The juice of the grape is boiled down four or five per cent. before it is allowed to ferment.[1] Much more is made in this way, and the wine is commonly sweet; that is, not very acid.[2] (3) The grapes are dried in the sun from five to ten days, till the stems are dry; then they are pressed, and *must*, skins, stems, and all are put into open jars to ferment for a month, after which it is strained and sealed up. Wine thus made keeps better than other kinds, and amounts to about one third in weight of the grapes used. Sometimes these three processes are combined in various ways, and the best wines yield thirty-three per cent. of what is called good brandy.

Wine is not the most important product of the vine. The vineyards of Bhamdûn, four thousand feet above the sea, are about two miles long and one half a mile wide. For three months grapes form the principal food of the villagers. Besides this, they make one hundred and eighty thousand pounds of raisins, and twenty-four thousand pounds of dibs, or molasses; all of this last is for their own use. Two thirds of the raisins are sold in Beirût, to make a candy called Helâweh, or steeped in water for a drink; a small part of them only is distilled.

When he asked whether brandy was ever put in wine, the uniform answer was, "It is dearer; why should we put it in?" But unintoxicating wine he could not hear of; and when he asked about unfermented wine, he was always met with a stare of surprise. The very idea was to them absurd, for their name for wine, hhamr, is derived from hhamar, to ferment, and means fermentation. Nor could he learn that any process was ever employed to arrest it.

Both Greek and Papal priests affirmed that sacramental wine must be perfect, pure wine; if unfermented it would not be used; and yet the Papists reject fermented bread, because they say Christ used that which was then on the table, just as for the same reason he used fermented wine. The Jews in Palestine use the same. The chief rabbi at Hebron gave Dr. Smith unleavened bread and wine during the Passover in 1835, and when asked how he could have it in the house, he replied, that as long as the acetous fermentation had not begun it was not prohibited.

The only form in which the unfermented juice of the grape is kept is dibs. To make this, the fresh *must* is mixed with a little clay to clarify it, and remove acidity, and then boiled down one half or three fourths in bulk. It is as thick as molasses, and is sometimes beaten till it becomes a bright yellow color, and

[1] It is amusing to read the comment of an American writer on this: "It was boiled to *prevent* fermentation" (*sic*). And then follows the equally edifying statement: "After fermentation wine cannot be boiled down to a syrup" (as though anybody had said that dibs was made from wine). — *Communion Wine and Bible Temperance*, p. 18.

[2] This sense of the term "sweet wine" is corroborated by President S. C. Bartlett, who, writing from Hebron, in his new work, *From Egypt to Palestine*, says that the guide Shappira brought two kinds of wine, one called "strong wine," and the other "sweet wine." The difference was caused by keeping the grapes three weeks before pressing them for the latter, which made the juice thicker and sweeter. Both were fermented; but, says President Bartlett, the sweet wine seemed to me the stronger, though its strength was disguised by its sweetness. This Shappira, an intelligent Jew, had never heard of unfermented wine at the Passover in Germany, Holland, Armenia, or Palestine (though he had traveled in them all), or of any who thought it ought to be so.

of the consistency of ice-cream. It is an eatable, and is never counted a drink. It is generally eaten with bread or used in cooking.

Rev. B. Labaree, Jr., wrote to his father, late president of Middlebury College: "After the most careful inquiry, I cannot learn that any unintoxicating wine is ever made in the country. All kinds are fermented, and all more or less speedily intoxicates. The unfermented juice of the grape is never used as a beverage. The Syriac word for wine, hhamra, means ferment."

Dr. C. V. A. Van Dyck, who completed the translation of the Bible into Arabic which was begun by Dr. Eli Smith, writes as follows:

"There is not, and, as far as I can learn, never was (in Syria) anything like unfermented wine. The thing is not known in the East. Syrup and molasses are made of the juice of the grape, but nothing called wine is unfermented. Raisins are sometimes soaked and eaten, and the water drank; but it is never called wine. *Must* is called mustar, and wine hhamr, because it is fermented. Whence hhameer = leaven, and ihtamâr = fermentation.

"The Orientals make dibs of raisins and ferment them for distillation into arrack; but neither grape juice nor raisin water could be kept: it would either be wine or vinegar in a few days, or go into putrefactive fermentation. The native churches — Evangelical, Greek, Coptic, and Armenian — all use fermented wine at the communion, and have no idea of any other.

"The Jews not only use it at their feasts, but use it to great excess. In my judgment the proper wine for the communion is that which the blessed Saviour used; *i. e.*, the ordinary wine of the country, such as was at hand when he instituted the ordinance."

Rev. J. H. Shedd, D.D., says: As a missionary, I have taken a deep interest in the discussion of the temperance question. In the far East we have the demon of intemperance to fight, as well as in America. Perhaps a brief account of our experience may contribute to a right understanding of the Bible method of dealing with this fearful evil.

I. Our experience gives no comfort to those who think an abundance of pure and cheap wine is a remedy for intemperance. We have never found wine an ally to temperance, though it flows around us almost as cheap and abundant as water. The region about Oroomiah is the land of vineyards. A cent can often buy three pounds of grapes. A gallon of wine costs but a pittance. Ever since the days of Noah that region has been the home of the vine. During autumn, grapes form one of the chief articles of diet. The preserved products of the vineyards are raisins, grape-molasses, and wine. The wine is made in a very primitive manner, and is wholly unadulterated. All the varieties are very light, I believe, compared with those of Europe, and if any in the world are harmless, they are.

But beastly intemperance is the besetting sin of the people. The habit of unreformed Nestorians and Armenians is to drink wine as the camel drinks water. The drinking is usually done up between the vintage and spring. The wine is exhausted at Easter. Till then drunkenness is too common to excite remark. In large villages I have found it nearly impossible to find a sober man on a feast day. The immorality, mental degradation, midnight carousals,

and losses from riotous living, idleness, and crime cannot be exaggerated. The wine weddings are the bane of the Christian peasant, and the source of the debt and misery that often break up his home. Many acquire the passion for stimulants, and pass from wine to arrack. Among the nominal Christians of Persia, as elsewhere in the East, the worst obstacle to the Gospel is wine and the attendant intemperance.

II. The evil cannot be overcome by a half-hearted resistance. He who thinks that Christians can indulge as they please, attend convivial feasts, and still keep themselves pure, is mistaken. The remedy must be decisive antagonism to that which more than any other one thing dishonors God and destroys souls.

The conviction among the most thoughtful native Christians is, that total abstinence, not enforced by an outside pressure but adopted from principle, is the only remedy. Anything short of this opens the way to so many exceptions and disastrous lapses that it is unsafe, and, in our day at least, can never produce a pure and self-denying church, or stem the tide of drunkenness. But on what ground shall total abstinence be argued and enforced?

III. We have not found the true position to be what some call the advanced Bible ground that fermented wine is something in itself unclean and accursed. My experience of nearly eleven years in the East has not furnished the least basis for the distinction some make between fermented and unfermented wines in the Bible, or Bible lands. We should find it utterly impossible to lead men who speak Arabic and Syriac to acknowledge such a distinction, for they would say that the very name of wine — a word from the root Hhamr, to ferment — means fermented. The Syriac version of the New Testament was made very near the time of the Apostles, and this is the word used. The most diligent inquiries of those most familiar with Orientals in their own country can find no unfermented wine. The people know nothing of the luxury spoken of by classical writers, and nothing of any mode of preserving the juice of the grape from becoming intoxicating. The testimony of all familiar with the East is the same.[1]

The position is untenable in Bible lands that wine means the sweet juice of the grape, or that wine in all circumstances is unlawful and accursed. It would not carry a single conscience, but it would array the temperance reform against the plain teachings and example of the Word of God. If pressure could be brought to carry such a point for a time, the reaction would only be more terrible when that pressure was removed.

IV. The moral basis of total abstinence in the Koran is one it would hardly be wise to imitate, if we could. Unlike the Bible, the Koran makes wine under all circumstances a sinful, accursed thing. Strict Mohammedan law enjoins the destruction of every earthen vessel that has held wine, and a metal one must be washed, scoured, and sunned repeatedly ere it is used again. It is a crime to make, taste, or sell it. Islam is a compulsory total abstinence society, and is a partial success; but it is the success of superstition and force. In all the essentials of a true reform, enforced total abstinence is a failure,

[1] See *Bibliotheca Sacra*, January, 1869.

because Moslems regard it as a compulsory yoke, and the heart being unchanged, they only need an excuse to indulge in this as in every other lust. The essence of temperance is conscientious self-restraint, and this is wanting; hence Moslems have never lived up to their law, and with their waning faith drunkenness in Persia and Turkey is fearfully prevalent. Some have always evaded the law, under the plea that only wine is forbidden, and distilled drinks are not mentioned. So they drink arrack as the Irishman does whiskey. Many partake secretly, but large numbers are open drunkards, even maniacs of inebriation. Mohammedanism is a failure as a temperance reform, as it is in everything that pertains to good moral character. Christians can never covet such a superstitious virtue as abstinence has been in Moslem lands. The Mohammedan is a drafted recruit, who runs at the first fire. The truly temperate enlists from principle, and so endures.

V. In the East we are thus shut up to advocate this cause on moral grounds. We cannot resort to prohibition, nor can we use the doubtful interpretation that makes the Bible bless unfermented wine and curse the fermented. Such a distinction is not known. Wine is wine. It is the proper element to be used at the communion, the best symbol that Christ could have chosen. Some in Bible times used wine for the same purpose that we use tea and coffee now; and who knows but such times will come again?

But we do not now live in such circumstances. Wine is now joined with the whole train of destructive distilled liquors. It prepares the way for drunkenness. It is the source of sorrow, woe, and death. As in the days of Hosea, it is the companion of whoredom and every loathsome thing; and no fact is plainer than that the stream of drunkenness is fed by the use of the milder drinks.

Drunkenness is a sin which God will punish. Wine drinking leads to this, and to avoid drunkenness, with its temporal and eternal woe, we must dry up its springs. Here is Bible ground.

Still more emphatic is the law of self-denial for the good of others. Romans xiv: 21. This argument can be used with great force, for in the East wine is palpably the source of untold sin and evil. It cripples the church, causes quarrels among brethren, aggravates every other difficulty, causes backsliding, and prevents sinners from repenting in cases without number. Men are stumbling into death and hell, and the example of Christians using wine makes them allies of the destroyer. The charges against it are enough to make every friend of Christ and of souls a total abstainer.

Further: The Christian position is not one of mere neutrality. Christian liberty is not a cloak for self-indulgence. We have no right to say: "To drink or not to drink is equally lawful," for "whatsoever is not of faith is sin." We must be clear in our conscience that what we do is to save men and not to destroy them.

"But Christ made wine." Very true. He came to seek and to save the lost. Every act of his life tended to this. The miracle was not sinful, but eminently fitted to manifest his glory and confirm the faith of the spectators. Their thoughts were elevated from the banquet to his claims as the Son of God.

Let us follow this example. If we are placed in circumstances where making wine or drinking it is a decided means of leading men to Christ, let us do it. But who acts from such a motive in drinking wine? With its influence on the side of sin, with distilled liquors waiting to hurry on to ruin those whom his example starts on the road, who will advocate wine drinking as a Christian duty, or an act to which he is prompted by the love of God and souls? He who drinks, no less than he who abstains, should act from the conviction that thus he best honors Christ. I have seen Christians, yielding to appetite, plead liberty and harmless indulgence. I have seen them refrain from wine on Sunday as unfitting them for worship; but never one who pleaded that wine was a means of grace, or an aid to the cause of Christ.

These are the grounds on which we must wage this war in Bible lands, and it is cheering to know that such arguments are not used in vain. A good Protestant among us is generally a good temperance man; and all understand that one cannot be a wine drinker and at the same time an exemplary Christian. Dancing has been practiced by eminent saints; but who could be a follower of Christ and join in the lewd dances of the East to-day?

In scores of villages among Armenians and Nestorians enough has been saved by temperance to pay for the support of the Gospel, and in some churches there is a voluntary agreement that all should abstain entirely, rejoicing in the privilege of denying themselves to promote the cause of Christ. The Holy Spirit sets his seal to total abstinence, for often the first thing the awakened sinner does is to confess that wine is his enemy, and renounce it.

I believe in the use of every right means for the suppression of vice. Intemperance, as an evil in society, must be dealt with by the civil law; but in the church, abstinence must be placed on Bible grounds, which will stand the test of all time in every land. Leaving all questionable issues, let us plant ourselves on sound and defensible principles, and there let us stand.[1]

Rev. Dr. S. Wolcott, who spent three years in Syria, says in a letter to a friend: "My studies in Hebrew and Greek have confirmed the impression conveyed by our English version, that the wine of the Bible was fermented; that, indeed, nothing else was counted wine, though the fruit of the vine was used in other forms. Had I held a different theory, it could not have survived a residence in the land where the Bible was written. There the unbroken force of native tradition, both Jewish and Gentile, sustains the interpretation I have given, and it is embodied in permanent memorials. The wine used in the Eucharist by native churches of all sects is such wine, and no other, because they believe that it was used in the original Supper, and the Jews use the same and no other at the Passover, from a similar conviction. I am aware that these statements are disputed, but not by men who have lived in Palestine. Some commentators hold that the wine created by our Saviour was what the Arabs call dibs; but that is the native molasses — *must* boiled down to a syrup, and classed not as a drink but as food. Had the ruler of the feast at

[1] This condensed form of Dr. Shedd's views was read and approved by him when he was last in this country. The reader needs also to bear in mind that the region where Dr. Shedd labored is further from Syria than Pittsburg is from Boston, or Savannah from New York.

Cana, a judge of good wine, been served with that, it would have been no nearer wine, or less consistent with the sacred narrative, than sweet *must*, with no enlivening property whatever."

Rev. W. M. Thomson, D.D., in his new edition of *The Land and the Book*,[1] says: "Grapes not sold in the markets are dried into raisins, or the juice is expressed and boiled down into dibs — a syrup of grapes resembling molasses — an article frequently mentioned in the Bible, as is supposed under the kindred name of debash, but which in some places is translated honey, and in others manna. *It is not a beverage at all;* but forms a part of the ordinary food of the present inhabitants of Hebron, and throughout the land from Dan to Beersheba, and further still."

Rev. George E. Post, M.D., professor in the Syrian College, Beirût, Syria, says of the wine used at the institution of the Lord's Supper: "It was undoubtedly fermented. No such thing as unfermented wine is known here. The juice of the grape alone is not used as a beverage. The concentrated juice of the grape after boiling is not drink at all, but the counterpart of molasses and honey, which has become somewhat candied; that is, a semi-solid conserve, eaten with bread as a relish. To call this wine is to trifle with the text and meaning of Scripture. Temperance needs no such sorry and untruthful defence as this. Light wine is still made extensively in the East, and seldom abused."[2]

Rev. W. Wright, a secretary of the British and Foreign Bible Society, when he was a missionary in Damascus, obtained the following statement from the missionaries in Syria, to use in an article which he intended to write for publication:

"We, the undersigned, missionaries and residents in Syria, having been repeatedly requested to make a distinct statement on the subject, hereby declare that during the whole time of our residence and traveling in Syria and the Holy Land, we have never seen or heard of an unfermented wine; nor have we found among Jews, Christians, or Mohammedans, any tradition of such a wine ever having existed in the country. May, 1875." This was signed by Rev. W. M. Thomson, D.D., Rev. S. H. Calhoun, Rev. C. V. A. Van Dyck, D.D., and Rev. H. H. Jessup, D.D., missionaries of the Presbyterian Board, formerly of the American Board of Commissioners for Foreign Missions; Rev. J. Robertson, Rev. J. Crawford, and Rev. W. Wright, missionaries from Great Britain; Rev. J. Wortabet, M.D., a native Syrian, and Professor of Anatomy and Physiology in the Syrian College; R. Brigstocke, M.D., Professor of Obstetrics and Medical Jurisprudence in the same institution; James Black, Esq., who for more than forty years had been the leading foreign merchant in Beirût; and Michael Meshakah, M.D., of Damascus, the most learned Syrian in Syria. Will it be believed that an American writer, whose work is published by the National Temperance Society, calls this "a prejudged and formulated statement, prepared in Scotland by interested parties, and sent to Syria for *ex-parte* testimony?"

Thus far no allusion has been made to the testimony of Henry A. Homes, a

[1] *Southern Palestine and Jerusalem*, p. 279.

[2] *Sunday School World*, 1878, p. 200.

former missionary at Constantinople, not because he does not agree with all the rest, but because he has been persistently charged with contradicting them. Of course, if he does, then the house is divided against itself and cannot stand; but what are the facts? The following condensation of his statements in the *Bibliotheca Sacra*,[1] has been submitted to him and received his approval.

As among us wine is known to promote drunkenness, and the grape is supposed to be cultivated chiefly for the sake of making wine, it is difficult to do justice to the Bible commendation of the vine. To relieve the difficulty he enumerates seventeen products of the vine. These are grapes; the acid juice of the green grape, used in cooking; grapes slightly dried, for winter use; raisins, preserves, and confectionery made from *must;* pickled grapes, grape molasses, called dibs in Arabic, pekmez in Turkish; nardenk, grape sugar, vinegar, raisin drink, raisin wine, wine, brandy; the leaves of the vine, and the vineyard as a place for recreation. Now, so far from contradicting Dr. Eli Smith, this only corroborates what he said about the vineyards of Bhamdûn.[2] The only point in which he differs from any missionary is where he speaks of raisin wine, for Dr. Van Dyck spoke of there being none, *so far as he could learn;* but the different customs of Beirût and Constantinople may account for this difference, which does not at all affect the main point that there is no such thing as unfermented wine. What does Mr. Homes say about that? Let all candid men hear and decide for themselves, whether he sanctions the idea of an unfermented wine. His words are:[3] "*Wine as a fermented liquor contains a certain amount of alcohol, and there is no substance now called wine by any one, that is not intoxicating.*" Again:[4] "That which we at this day call *wine, we all know to be an intoxicating liquor.*" Again:[5] "All that is now called wine in the East is as truly wine as what is called wine in France.[6] *Whether boiled or not boiled, whether sweet or sour, all the known wines are intoxicating.*" And yet this is the witness brought forward to prove that wine in the East is unfermented! His article is the sole basis for such rash statements as "a dozen missionaries have testified to it." But does he not speak of the inspissated, unfermented juice of the grape?[7] Yes; and this is what he says:[8] "*It is never regarded as a boiled wine,*[9] but as a sweetening syrup. It may sour, but *never becomes wine,* on account of the amount of boiling." Dr. Smith had said: "It may be beaten to the consistency of ice-cream." Mr. Homes says: "Beaten and stirred up with mustard seed for some days it becomes a whitish paste." What is the difference in the two statements? Again he says:[10] "The *boiling which some give their must to secure a wine that will keep better should not be confounded with boiling the same must to make sugar and molasses.* The one is not reduced one twentieth in bulk, the other is reduced more than three fourths.[11] *Hence inspissated wine should never be confounded with inspissated grape juice.* The former gives us an intoxicating liquor, the latter molasses." "In some districts," he says, "the people regard the boiled wines as stronger than the unboiled." We

[1] *Bibliotheca Sacra*, 1848, pp. 283–295. [2] p. 432. [3] p. 284. [4] p. 284. [5] p. 292.

[6] In a letter to the writer, Mr. Homes, to whom I forwarded all I have written about him, said, "I do not see that you have at all misapprehended my meaning. There is no wine in Syria or Turkey as little intoxicating as the wines of the Rhine." [7] Dibs or pekmez. [8] p. 289. [9] Vin cuit.

[10] p. 292. [11] Dr. Smith had said one half or three quarters.

might say the same of the sweet wines; that, though by drying the grapes in the sun, or boiling the *must*, the wine is made sweeter, such wines are still intoxicating, and some of them extremely so.

In another place[1] he says: "Whatever language has been used in modern or ancient times, describing certain wines as unintoxicating, should be received with much allowance. If Horace speaks of the *innocentis pocula Lesbii*, or if Atheneus declares that *surrentina vina caput non tenent*, the language is comparative merely, and means that some wines were not so intoxicating as others." He does not mention pressing the juice of the grape into a cup to be drunk immediately, among the uses of the grape, because no such custom exists, unless among children at play. On the contrary, he affirms:[2] "There is no sufficient evidence to prove it a usage of antiquity. We cannot say that the butler of Pharaoh had such a habit, for he only did it in a dream. Genesis xl:21 tells us that when set at liberty he simply gave the cup into Pharaoh's hand. Nor does the language of classic poets, treated by the rules of ordinary criticism, imply that the drinkers of those days were satisfied with such abstemiousness. Statues have indeed been found representing the juice pressed directly from the cluster into a cup. But this may be as much the language of imagination as any poetry, and little accords with the accounts of either Bacchus or his followers, who never touched grape juice till it was well fermented." So entirely is Mr. Homes at variance with those who dream of an unfermented wine.

How such testimony can be made to contradict that of other missionaries it is difficult to understand. Mr. Homes is even careful to say:[3] "When travelers have met with some of these liquid and almost solid products of the grape, they have called them wine. Thus Parry states that 'the Turks carry with them on their journeys unfermented wine,' which could only be some kind of grape syrup."

But what about nardenk? Mr. Homes says:[4] "It ordinarily has not a particle of intoxicating quality." Then he would refuse to call it wine; but he says, *ordinarily* it is not, implying that sometimes it is. When is it so? He tells us:[5] "Some large jars of it fermented on a voyage from Asia Minor to Odessa, and then the owners paid duty on it as wine." Then before, it was not wine, but when it fermented, even an Oriental, however he might grudge it, could not refuse to pay the duty that fermentation made collectible. Then fermentation was the door through which it entered the domain of wine. But does not Mr. Homes call nardenk wine? No. See how carefully he speaks:[6] "As there has been great search for an unfermented wine, as soon as I came on the traces of nardenk I followed them up to see what it was, for though in the present use of language *an unfermented wine is an impossibility*, yet here is a *cooling grape liquor* which is unintoxicating, and seems to correspond with certain drinks included by the ancients under the term wine." Did he find, then, that it actually corresponded? Near the close of his article he gives the reply to that question thus:[7] "We need not look for an unintoxicating wine to account for the blessings pronounced on the vine in the Bible." The follow-

[1] p. 292. [2] p. 294. [3] p. 295. [4] p. 290. [5] p. 290. [6] p. 290. [7] p. 295.

ing sentences from a letter to the writer, dated April 19, 1870, may make his position even plainer still: "It is not intended to ferment any more than canned preserves; still it does sometimes ferment, and so, becoming what it was not intended to be, must then be called wine. In its natural state it is not fit to drink. I would add that my interest in nardenk was not owing to its absolute importance, but because it was something undescribed among the sherbets of Turkey, and I wanted to study it in connection with matters in dispute at home, but *I never thought of implying that I had found a wine that would not intoxicate.*"

The writer does not know of a missionary in Bible lands who gives the least encouragement to the figment of an unfermented wine in those lands, unless it be a single unintentional mistake in Miss Maria A. West's *Romance of Missions*, and as it gives an opportunity to commend a most excellent book, and no one will be more glad of the correction than the author, to whom all lovers of the missionary work are under so great obligation, the writer will here venture to correct it.

This volume is a duodecimo of seven hundred and ten pages, published in New York in 1875. It gives a series of interior views of missionary life, such as few others could have written. They are not only vivid sketches; they are as accurate as they are vivid. The author has the rare gift of knowing what to put into the picture and what to leave out. Some might even be present in scenes which she describes and not see so much as her pages set before us. The only point of resemblance between the book and "romance" is the intense interest with which readers peruse its pages. The unreality of "romance" is here wholly wanting. The writer could not but feel the deepest interest in pages that described the same route from Marsovan to Diarbekir over which he passed in 1842. Miss West stopped repeatedly in the same building that he had spent the night in before her, and the old "environment" seemed to come back out the misty past under her magic touches distinct as yesterday. But we must not forget the correction. On page 589, after statements that imply Miss West had personally known no other wine than that which intoxicates, she adds in parentheses: "In the Syrian[1] church, the oldest in the world, *it seems* that fermented wine is not used for the communion. When the fresh juice of the grape cannot be obtained, raisins are soaked and the juice expressed for that purpose." Now two things are plain here: one that Miss West was speaking only from hearsay, and the other that she had reference only to times when not "the fresh juice of the grape" but "wine," as we shall see, cannot be obtained. It is not difficult to see where she got her information. The erroneous statement of an exceptional case made by Mr. W. F. Ainsworth journeying through the country of the Mountain Nestorians at a season when the wine of the preceding vintage is sometimes exhausted — thirsty throats having been unable to stop drinking while it lasted — and when unusual methods have to be employed to supply the deficiency, has been exalted into a correct statement of a regular custom. The writer will not state his own recollections, though he spent two years among the Christians of Eastern

[1] The printer has it Syriac, which relates to language, not to churches.

Turkey, and visited the Mountain Nestorians both before and after the massacre, but gives instead the written testimony of the most intelligent native member of the evangelical church in Mosul — a man who has been, we trust, a true disciple now for nearly forty years. Micha Ibn Yonan writes in Arabic, in a letter dated April 15, 1874: "We, and all the other Christian sects, use fermented wine, hhamr muhhamr, at the Lord's Supper. That is, at the end of summer, men gather grapes, press them, and make from the expressed juice wine, which is preserved both for a beverage and for the Lord's Supper. But the Jews at the Passover make new wine from raisins, that is, dried grapes, yet that is fermented[1] (yihhtamr) also; and they say there is no injury from it, for it is new; but all of it is fermented and intoxicating, or causing fermentation (muhhtamr wa muhhamr), and we also sometimes use this." This testimony of one who knows, may correct the unintentional error occasioned by reporting from hearsay.

The above was written without the slightest expectation of ever seeing Miss West; but the writer is now happy to add that she has seen the above statements in manuscript, and cordially endorses the correction of a mistake that arose simply from giving too hasty credit to a report that has since proved unworthy of confidence.

[1] This statement of Micha shows that Mr. Ainsworth blundered as usual when he said (*Travels in Asia Minor*, etc , Vol. II, p. 209) that "raisin water supplied the place of wine at the sacrament" in Duree. It could not have been raisin water, or raisin drink, as Rev. H. A. Homes calls it (*Bibliotheca Sacra*, 1848, p. 291), for that "is drank only when freshly made." The sherbetjee "ladling out raisins and liquor together for his street customers." It was "raisin wine," which is made by soaking one part, by weight, of raisins, in four parts of warm water, for two days; then the raisins are taken out, bruised, and again put in, till the fermentation has been sufficient. The result is called in Arabic, nebidh, and is often distilled to make brandy. Nothing else would have been used by Mar Eeshoo or any other Oriental ecclesiastic.

We have seen Colonel Chesney (see page 67 of this volume) misled by his blunder of "a bridge of ropes" (*Travels in Asia Minor*, etc., Vol. II, p. 217) at Lezan into the general assertion that "the intercourse from side to side of the Zab is by means of rope bridges," and friends of temperance have been misled in like manner by this other blunder of "raisin water" into statements equally general and just as baseless.

XXI.

NATIONAL REGENERATION.

THE plan of this volume includes an account of some of the instances in which our missionaries have regenerated communities and lifted them from the mire of the pit. It is almost impossible to give an adequate picture of these changes to one who has not personally witnessed both the previous debasement and the subsequent improvement. Something has already been said of the moral and social condition of the heathen without the Bible; but there is much more that might be added, and still more that cannot be repeated, it is so vile. If we look at the work as a whole, Dr. M. Mitchell, of Edinburgh, reports that more than two millions of men now living have been rescued from paganism through Protestant missionaries, during the last fifty years; but our view will be more intelligent if we consider the several fields in detail.

SANDWICH ISLANDS.

At the Sandwich Islands the property of an entire community was less than that of our average citizen. Books they had none. The knowledge of their wisest men was exceeded by that of our little children. They spent their time in sleeping and swimming, clapping their hands and tattooing their skins, roasting bread-fruit, climbing for cocoanuts, and catching fish. The women, with long patience, beat out cloth from the bark of trees, played in the surf, and painted with turmeric. Their moral character has been already described.

In 1826, only six years after the commencement of the mission, John Young, who had been on the ground for more than thirty-six years, wrote of the thousands he had seen massacred in war, and the immense numbers slaughtered on idol altars; but, he added, "I rejoice that true religion is supplanting idolatry; that a code of Christian laws is taking the place of despotism, and good morals are superseding vice and crime."

The missionaries gave them the Bible, and through that the family, schools and churches, industry and commerce, literature and constitutional government. The facts detailed by forty-one missionaries in 1848 are a marvel of history.[1]

[1] See *Hawaiian Islands*, by R. Anderson, D.D., pp. 92-98; *Missionary Herald*, 1849, pp. 17-23.

Any prediction of such a change beforehand would have been scouted as the wildest dream.

Dr. Anderson says, this people have been humanized by the Gospel. Instead of a murderous war-spirit is one of gentleness and peace. They obey the laws and regard the rights of property. Marriage was one of the earliest fruits of the Gospel. There were two thousand weddings between July 1, 1830, and July 1, 1831. The domestic arts flourish; sewing machines and melodeons may be seen even in the homes of the poor. Women taught by missionary ladies are often accomplished in manners and elegant in dress. In 1836 the king and chiefs applied for instruction in agriculture, the arts, and the science of government, and Rev. W. Richards, in 1838, was released from the service of the Board to aid them in their public affairs. Instead of all power being in the hands of one man, as the missionaries found it — the chiefs even holding power only at his pleasure, and with no law to shield the people from plunder at any time or at any extent — June 7, 1839, a bill of rights was voluntarily given by the king. A constitution was conferred October 8, 1840, and the government was modeled after that of England. The government provides for popular education, and there is all the machinery needful for the healthy development of national life.[1] The constitution ordained that "no law shall be enacted at variance with the Word of the Lord Jehovah, or with the general spirit of his Word."

Rev. S. H. Damon, the well-known seamen's chaplain at Honolulu, states that the proportion of true Christians among them is as great as in any part of Christendom.

A correspondent of the *Boston Journal* writes from Honolulu in 1870: "Fifty years ago they were a horde of naked savages, offering human sacrifices and sunk in the grossest sensuality. Today they hold a place among Christian nations. A constitutional government administers equitable laws. They have the appliances of an advanced civilization. Churches dot the islands, and the proportion of readers is larger than in Boston."

Previous to that,[2] Dr. Leonard Bacon challenged any one to show that even in the capital, where foreign demoralization is most intense, vice is worse than in our own commercial cities. Our missionaries found them as naked as Adam and Eve in Paradise, and quite as far from being ashamed. Now they are decently clothed, with comfortable homes; native mechanics ply their trades, and industry and thrift widely supersede the indolence and waste of savage life; while the Sabbath is kept as well as in Scotland or New England.

In this connection, their Christian benevolence deserves honorable mention. In 1870 the members of nine churches in the island of Hawaii gave on an average $4.10 each. The Hawaiian churches in 1870 contributed $31,000 in gold, and $6,476 of this amount were for foreign missions. Their missionaries have been the means of Christianizing fourteen of the Marquesas Islands. In 1867 one church had five missionaries, with their wives, in those islands, and others preparing to go.[3]

[1] *Hawaiian Islands* (Anderson), pp. 238, 325.

[2] In 1864.

[3] *Missionary Herald*, 1871, p. 10; *Foreign Missionary*, 1881, p. 444.

At one time in Waimea, the court-house door was closed for weeks, and the magistrate said that the place was so free from crime it could get along well enough without him.[1]

Hon. Richard H. Dana, Jr., of Boston, a member of the Episcopal church, wrote from the islands, in 1860, to the New York *Tribune* in substance as follows: In less than forty years the missionaries have wrought a wonderful change. They have established schools and reared up native teachers, and, whereas they found the people half-naked savages, eating raw fish, oppressed by feudal chiefs, and abandoned to sensuality, they see them now decently clothed, lawfully married, and going to school and worship with more regularity than our own people. The more elevated among them hold seats on the judicial bench, and in the legislature, or fill the local magistracies.

Every mission family was a source of civilizing influence; each mission-house was a dispensary, and each missionary a school-teacher. The missionary ladies not only taught them from books, but to sew, knit, and iron clothes, and, better than all, to train up their children. Approaching them in sickness with the peculiar sympathies of the sex, they exerted the tenderest, and so, often, the most efficient influences.

For two months I have been a guest in many of their families, and I can truly say that, besides fidelity in the discharge of their duties to the natives, in kindness to strangers, and general information, it would be hard to find their superiors at home. I have seen in their homes collections of minerals, plants, shells, and flowers, valuable to science, and they have often preserved the best, sometimes the only, records of volcanic eruptions, earthquakes, and meteorological observations. They have done nearly all that has been done to preserve the national traditions, legends, and poetry; but for them the Hawaiian would never have been a written language; there would have been few or no reliable records, historical or scientific; tradition would have perished; the native government been overborne; and the interesting, gentle native race sunk into servitude to foreigners.

The educational system of the islands is their work, and one of them is now minister of education. In every district are free schools, where, besides reading and writing, singing by note, arithmetic, grammar, and geography are taught by natives. At Lahainaluna is a normal school, now partly supported by government. Several missionaries have schools for advanced studies. One of them, Mr. Lyman, at Hilo, has nearly one hundred boys, who maintain an orchestra of ten or twelve flutes. At Honolulu is a royal school for natives, and another middle school for whites and half-castes. The college at Punahou, established at first for missionary children, now receives the children of other foreigners, and is incorporated. The professors are graduates of the school, and completed their education in the United States, one of them the first in his class at Williams College, and another the same at Yale.

Some visitors to these islands have disparaged the missionaries; but after visiting among all classes, from the king to the beggar, and seeking information from all, both natives and foreigners, friendly and unfriendly, I find

[1] *Missionary Herald*, 1871, p. 153.

that the best men, and those best acquainted with the history of events here, hold the labors and conduct of the missionaries in high esteem. Mere seekers of pleasure and gain do not like them. Those who sympathize with that American naval officer who, by threatening to bombard the town, compelled the authorities to send off women to his vessel, are naturally hostile to missions. Doubtless the missionaries have influenced legislation and the police system. It is fortunate that they have done so. Had they and their friends not prevailed, it would have been the usual history of a handful of foreigners exacting everything from a people who denied their right to anything. The government and its best friends stand between the people and the besieging army.

In the interior a traveler may carry money through the wildest regions unarmed. I found no hut without its Bible and hymn-book, and family prayer is as common as in New England a century ago. The Hawaiian missionary society was organized in 1851 to carry the Gospel two thousand miles beyond to the islands of Micronesia, and also to the Marquesas group.

It was fitting that at the first Universal Exposition in Paris, the hideous idols once worshiped in Hawaii should be placed alongside of the Hawaiian Bible, with a number of books, some charts, and several copies of native periodicals, a silent testimony to the influence of missions on the destiny of nations.

The success of missionary work in the Sandwich Islands is so remarkable, and at the same time so much spoken against by some, that it is no work of supererogation to adduce the testimony of another witness, an Episcopalian clergyman, the Rev. Franklin S. Rising, who wrote in June, 1867, to one of the secretaries of the Board in substance as follows:[1]

Ill health led me to the Hawaiian Islands a year ago, and kept me there four months. The recollections of that visit are very fragrant, not so much from the pleasure of a sojourn in the tropics, and a descent into one of the grandest volcanoes of the world, as from the rare privilege of seeing for myself what can be done in half a century, by the blessing of God, for a heathen people. As the controversy growing out of the Reformed Catholic mission had filled the air with conflicting stories, I resolved to see for myself what had been done, or left undone, by all concerned; and I sought to carry out this purpose in the fear of God. In doing this I visited thoroughly the principal islands and nearly every mission station, with their religious and educational institutions. I made the personal acquaintance of missionaries of all creeds, and the more I investigated the more I felt that your work there had been an eminent success. I use the phrase eminent success, however, in a relative sense. All has not been done that could be desired, but more than could have been expected. The time has been too short to complete the process of Christianizing a nation; but it has been long enough to transfer them from the sway of heathenism to the benign influences of the Gospel. To me it seemed marvelous that in so short a time the social, political, and religious life of the people should have undergone so radical a change. Looking at the kingdom of Hawaii nei as it takes its place today among the nations of the world, I see in

[1] See *Missionary Herald*, 1867, pp. 225–231.

it one of the most blessed manifestations of the power of the Gospel; but to speak more particularly:

I found *your missionaries* mostly venerable men who had toiled, some of them, fifty years in the service, till their hair had grown gray and their grandchildren were around them. They have held to their work with a tenacity of purpose truly sublime. They have won, and still retain, the confidence and love of the people. In every department of the national life, civil, religious, and social, they have made their mark, and of it they have no reason to be ashamed. Whatever of good is in the nation is due under God mainly to them. Whatever of evil remains, lingers in spite of their unceasing efforts to remove it. They have been charged with seeking to make Hawaiians "over-righteous," but never with conniving at sin. They have toiled to make a licentious race virtuous, and to supplant drunkenness with sobriety. They have given the people a written language, a literature, and both educational and political institutions based on the Word of God and the rights of men. They brought into a heathen despotism ideas of right and wrong, of justice and truth, of the fatherhood of God and the brotherhood of man. That they made some mistakes was to be expected; that they did not make more excites our wonder, for to err in judgment is the experience of their brethren the world over. That their constant aim has been to promote the true interests of the Hawaiian race no one can deny.

It is said that we must live in the same house with a man to know him thoroughly. Now, as there are no hotels outside of Honolulu, and the missionaries are hospitable, I have been able to become well acquainted with them. I was received by them with affectionate kindness. I sat with them at their tables, knelt at their family altars, went with them to their churches, and saw them in their annual meeting. I found them genial Christian gentlemen. Though I was almost impertinent in my questions, I soon learned that they had nothing to conceal, and my affection was won by the cheerful piety of their homes.

Their sons and daughters are a bright testimony to their wisdom and piety. Born and brought up for the most part in these heathen islands, they have been educated in great measure by their parents, amid pressing cares, and far from the advantages of New England. Yet when they visit that home of their fathers they have won respect for their intelligence, accomplishments, and above all for their piety. All of the daughters, and most of the sons, are spotless in their characters, loving their native islands, speaking the Hawaiian language correctly, and in all cases sympathizing with the work of their parents. The sons are clergymen, teachers, planters, lawyers, merchants, physicians, and editors. The daughters teach or set a good example in the ordering of their own homes. They are deeply interested in all that concerns their dear Hawaii nei, and there is no class whom the Kamehamehas could so ill afford to lose.

In forming an estimate of what has been done for the natives, we need to guard against either superficial judgment or too high expectations. The good and bad are mixed here as elsewhere. Because some cannot find New York and London reproduced here, they think nothing has been done worth report-

ing, and that accounts of native improvement are "pious frauds." But less than fifty years ago they were heathen; their vices are hereditary, their virtues are acquired; their past is against them; the mode of life induced by their climate retards their progress, and foreign residents too often tempt them to the service of Satan. Hence we should expect to find them children in the arts, in education, religion, politics, and personal character, and to see elementary forms of civilization and Christianity.

Take first their civilization. As you step on shore at Honolulu you see the intermingling of the barbarism of the past with the civilization of the present. Here is an old man eating a raw fish-head, there a woman in civilized dress is fattening a puppy for the table. Some, whose habits were formed when the missionaries came, cling to the past. Those who are younger adopt foreign customs as far as they can, while others, like the royal family and the chiefs, are elegant in their dress and establishments, and would be at ease in any drawing-room in Christendom. Though as a people they have not climbed as high as we have, their progress is commendable. In some thatched huts you find sewing machines and melodeons. They are acquiring the industrial arts. A larger proportion read and write than in any other country. Many write for the papers. They discuss politics, and vote. They enter the legislative assembly and talk, till the kingdom breathes freer when they adjourn. The pomp and pageantry at the opening of parliament, the foreign embassadors, and the reading of the royal address, ought to be good evidence of their civilization; and all is the direct result of the missionary work.

What of their Christianity? Tried by the same tests as our own, certain things indicate that it fills a high place in the national heart. The constitution recognizes the Christian faith as the religion of the nation. The Bible is in almost every hut. Prayer — social, family, and individual — is a national habit. The Lord's Day is better kept than in New York. Stone and brick churches dot the islands, built by the freewill offerings of the people. The Word is preached and the sacraments administered. Nothing but their language and complexion distinguish their Sunday schools from ours. Their religious contributions are generous, and an educated native ministry grows in numbers and in influence.

Some striking contrasts impress us with the greatness of the change in these islands. Some of the churches are built of the very stones that formed the old temples where human sacrifices were offered. A former priest offered prayer at a service where I made an address, and some told me, through an interpreter, of the idolatrous rites in which they had taken part, and rejoiced in the great change that had taken place since then.

But we want evidence that the Gospel molds the individual character; and bright examples in the past bear witness to this, as Kaahumanu and Kapeolani, and some now living, were pointed out to me, whose lives, once notoriously wicked, are now changed. They love the Bible, the sanctuary, and prayer, and are hungering after righteousness. There are doubtless tares among the wheat; and where are they not? So licentiousness is the sin of the land. Missionaries grieve over much which they cannot prevent, because foreigners tempt

natives to sin and then condemn them as sinners. The people are like their volcanoes: some still active, others having spent their force, and still others peaceful as those craters where the okias bloom and the birds sing sweetly and dwell safely.

Two things always betokening spiritual health mark the Christian life of Hawaii: one is foreign missionary zeal, and the other a growing native ministry. But we need not follow Mr. Rising as he expatiates with delight on these marks of religious life in these islands. He adds:

"I have only touched the surface of my subject; but I have said enough to indicate the triumph of the Gospel in Hawaii nei. Should I contrast their efforts with those of missionaries of other creeds, their success would be more marked and apparent."

Rev. G. L. Chaney, formerly pastor of the Hollis Street (Unitarian) church, Boston, in his work on the Sandwich Islands, entitled *Aloha*,[1] says in substance:

"Do you think," one asked of a religious merchant of Honolulu, "that the mission here has really done the people much good?" "That depends," was the spirited reply, "on whether the natives have souls or not." I would be willing to rest the question on much lower ground, for even if the benefits of the Christian religion were for this world only, it would be preëminently true that Christianity has blessed and redeemed this people. The people of the United States have contributed more than a million of dollars to this mission. What have been the returns? In 1863 fifty-six Protestant churches, to which sixty-seven thousand members had been received. Add to this common schools, the translation and circulation of the Bible, and a large amount of educational and Christian literature. Follow missionary influence through all the departments of the work and it will be found that not only religion, education, literature, even the very existence of a written language, but the government itself owes its best features to Christian teaching. The first utterance of the bill of rights — a paper corresponding to our declaration of independence — says, in Bible phrase, that "God has made of one blood all nations of men;" and the motto of the kingdom today is, that "Righteousness is the foundation of the land." In the code of laws it is provided that "the religion of Jesus Christ shall continue to be the established religion of the Hawaiian Islands." Thus, in form and in substance, is the government based on Christian principles.

Dr. Coan has labored here nearly fifty years, and every house within a hundred miles knows and honors him. In 1869 he had received twelve thousand six hundred and twenty-seven people into his church — the largest church roll of any minister in his generation. More than two thousand were received on one day, though their conversion was not of that ephemeral sort, for their sincerity had been tested by a long previous probation. If I dwell on his work, it is not because he was the chief missionary, but because he is a fine example of his kind. At church I found the veteran standing in the door welcoming with beaming face and a hearty grasp of the hand the people as they entered, and

[1] Love to you.

when I saw some Chinese church-members among them it gave me a sense of the brotherhood of man, with which the intellectual assent to this truth at home compared only as a fine description of a luscious fruit with its actual taste.

Dr. Coan came up the road to his church one Sunday at the head of a funeral procession. The large church was full. No chief would have had a larger funeral; yet the deceased was only a nurse and day laborer. Her worth, and not her rank, was her glory.

I was in Honolulu when the "Morning Star" returned from her annual

QUEEN OPATINIA

voyage to Micronesia. She brought glad tidings from afar; for there the Word of Jesus Christ had taken such hold that the queen of one island (Opatinia) had left her kingdom, and her pleasant home, to bear the news of salvation to islands further west.

Speaking of the spread of Christianity, Mr. Chaney says: "It went with Paul the length of the Mediterranean, and sent the divinities that crowded its shores sighing from their fanes; it crossed the Atlantic with Columbus, the prevailing motive of whose voyage was the advancement of Christianity; it occupied the new world in the name of Christ, and years afterward sent its missionaries to the Pacific isles, to conquer them for God. If we could know

what cruel rites, involving human sacrifice; what deadly worship, perpetuating human ignorance and hate; what tyrannous inequalities, shielded by the death-line of a pitiless tabu; what habitual warfare and shameless vice; what rooted wrongs, persistent injuries, established lies, and low customs this rebuking, renewing religion of Jesus Christ has met and overthrown, we should not spend our strength in needless criticisms upon its earlier evidences, or passing accompaniments, but, convinced and converted by its abiding purity and power, we should go forth to share its blessings with all mankind."[1]

In Micronesia the native languages have been reduced to writing. That of Ponape by Dr. L. H. Gulick and Rev. A. A. Sturges; that of Kusaie by Rev. B. G. Snow; that of the Marshall Group by Rev. E. T. Doane and Dr. G. Pierson; and that of the Gilbert Islands by Rev. H. Bingham, Jr.: while the Mortlock Group is indebted to Opatinia, a converted princess of Ponape, for the same service. The dialect of the Marquesas Islands is allied to that of the Hawaiian and Tahitian Islands, and whatever has been published in it has been published by the missionaries of the Board. Dr. Gulick's vocabulary of the Ponapean language may be found in Volume X of the *Journal of the American Oriental Society*. That of the language of the Gilbert Islands, by Mr. Bingham, containing five thousand words, has not yet been printed. Numerous schools have been established, among them three training schools; and more than two million five hundred thousand pages have been printed. The Bible exposes the foulness of vice, and reveals to them the way of life. Churches and Christian homes have been formed; the rights of property and the sacredness of human life are maintained; natives have become teachers, magistrates, legislators, and preachers of the Gospel. Thus the foundations of social order have been laid, and commerce, and even art, have found homes in Micronesia. In December, 1879, the "Morning Star" visited the Mortlock group, a portion of the Caroline Islands, which is the chosen missionary field of the church at Ponape. Here, at Nomr, as the tide was low, the canoe in which the missionaries landed was lifted bodily out of the water and carried to the beach, where, at the head of a broad road, stood a fine new church, the comfortable houses of the people lining the road on either side, all the result of one year's labor by Moses and Deborah, the native missionaries. Twenty-six couples were married, the church dedicated, and nearly sixty were ready to be organized into a church of Christ. A ball of cocoanut fiber as large as a hogshead was their first missionary offering; and the people wanted to give their necklaces, bracelets, and rings for the same object. They even gave up their loved pastor and his wife, as best qualified to go to an island beyond, and accepted the pastor who had been brought to take his place. Moses was taken to Ruk, whence a chief had come to Nomr and been waiting nine months for a teacher to carry back with him; and here, too, he was received with great joy, though the "Morning Star" had never been there before, and the natives hid out of sight till they recognized their chief. The chief, bearing the name of Paul, with wife and daughter, landed in Christian clothing among their naked people.

Fifteen hundred natives are already in the churches, and one thousand

[1] *Aloha*, pp. 155-160.

pupils in the schools. There is a gradual blossoming of civilization out of the vigorous growth of Christian institutions. At Ponape the king sanctioned the election of a Christian chief, and this was followed by the election of seven persons to act with the chiefs as a legislature, and seven more as sheriffs. A court was also regularly constituted for trying offenders. February, 1874, a law was passed giving one homestead to every man who would build a house upon it. Here is plainly the germ of a Christian nation, and though eddies will doubtless occur, the main current of improvement will flow onward.

In 1878 the young king of Apaiang, with his people, adopted a written code of laws ; and so Micronesia follows on, not far behind Hawaii.

WESTERN AFRICA.

In Western Africa the evils of heathenism had long been aggravated by the slave-trade. Polygamy, witchcraft, and other cruel customs prevailed. Mr. Bushnell tells of a sick chief sending for fetich doctors, who drowned a slave that they alleged had caused the sickness by his witchcraft, then killed another in whose body they pretended to find a live witch, and after that, at the funeral of the chief, put a third to death in a most cruel manner. In a Shekani town, one man, accused of witchcraft, was burned to death over a slow fire, in 1863. The Mpongwes are rapidly decreasing, through their vices and superstitions. The Bible description of heathenism [1] is true to the letter among them. They often give to the cannibal Pangwes, who come from the interior, a man to be killed and eaten. The women are bought and sold, whipped, and compelled to work beyond their strength. This renders them perverse and malicious, and they are utterly unchaste.

Here the Bible has been given to fifteen tribes. Four thousand children are in schools, and seven thousand natives in the churches; though the results have not been so marked, nor is the prospect so promising here, as in some other fields of labor.

ZULUS.

The Zulus, in South Africa, occupied the same low level of sensual savagery. One can hardly imagine a social state worse than theirs. It was more bestial than human. Their women were bought like cattle and for cattle, and their polygamy was of the worst form. Men and women were grossly drunken and licentious. Unchastity was frowned on only after marriage.

When asked, "Who made you?" they replied, "The first man." "And who made him?" "He grew from a reed." "And who made the reed?" They could not tell. They thought that snakes were re-incarnations of departed human souls, and so worshiped them. Forty thousand of such heathen are now professed disciples, and a larger number are in school. Rev. A. Grout said in 1865: "I have lived to see a hundred fold more than I ever dreamed of." In 1857 one hundred Zulus, each with one wife, lived in decent houses. Two years later school-books were printed, and land owned by its cultivators, who

[1] Romans i : 24 — to the end.

carried their surplus produce to market. In 1874 there were the usual industries of a civilized community; houses furnished, and lighted up in the evening; numerous native preachers, who were a power for good;[1] while thirty schools, besides higher schools mentioned elsewhere, with many educated women, were working out a higher destiny for that race.

Major Malan, an English officer, who traversed the Zulu country in 1874 and 1875, says: Across the Nordsberg mountains, on my way to Umsunduzi, I passed a Zulu Christian settlement, whose well-built houses, neatly thatched and well arranged, formed a striking contrast to the heathen huts in the valley below. God's Word and worship were there, family prayer and domestic decency, where, but for missionary labor, had been the degrading obscenities of heathenism.

When our missionaries first went to Western Asia, the nominal Christians were over-religious, yet wholly irreligious, for their religion was only outward ceremony. They held certain doctrines, not for the sake of their influence on character, but with a tenacity proportioned to their variation from those of other churches.

JAMES DUBE, A ZULU PASTOR.

Dr. Goodell says:[2] There is no more moral character in their prayers than in their ablutions. No one expects to find a man more honest, more hospitable, more benevolent, or more heavenly-minded, because he prays. No one feels life or property more secure because he is among men who pray. No one is supposed to be less selfish or impure, less covetous or fraudulent, less of a robber or murderer on account of his prayers. Indeed, it is true that immorality keeps pace with punctilious religious observances. They scruple neither at vice nor violence; and what Dr. Goodell said of nominal Christians, is also true of Moslems. Dr. Grant never felt in such danger among the Kûrds, as when his guide, having settled old scores by going through his prayers at the roadside, was all ready to begin a new account. If our missionaries had done nothing else, they have done a great deal in introducing the idea into Western Asia that religion has something to do with character and conduct.

[1] We introduce the Rev. James Dubè, one of these, to the reader, in the accompanying engraving. See *Missionary Herald*, 1879, p. 240.

[2] *Old and New*, p 25, *seq.*

The most intelligent among the Greeks acknowledge the debt their country owes Dr. King for his brave defence of religious freedom. He gave an intolerant nation just ideas of religious liberty. He influenced the current of national thought toward a respect for individual rights. He introduced the Bible into their schools, and pressed home its teachings on the people; and now, while these lines are penned, comes the news that the minister of public instruction in Athens has ordered the New Testament introduced as a text-book in the schools. Surely the seed planted by Dr. King is bearing fruit. His public defense under repeated prosecution in the courts, gave him a grand opportunity for testifying to the truth, and he improved it well. Bravely did he thus break up the fallow ground and sow the seed of a brighter future for Greece, and though the full harvest is not yet, it is sure to come.

Missions in Turkey have blessed both the oppressor and the oppressed. Fifty years ago, if a janizary wanted to try a new sword he tested its quality by cutting off the head of any Christian who might be passing in the street.[1] Or he would lay a wager with his comrade that he could hit the rayah[2] walking at a distance, and shoot him down without fearing to be called to account. No Christian could testify against a Moslem. This civil tyranny — pardon the expression — had its ecclesiastical counterpart. Death was the penalty for apostasy from Islam. As late as 1843, an Armenian, who had repeated the Moslem creed and then returned to his own church, was beheaded in the streets of Constantinople. The demand of the European powers, led by Sir Stratford Canning, but largely due to missionary influence, obtained a pledge from the sultan that there should be no more persecution for religious opinion, and though religious freedom is a plant of slow growth, yet under missionary culture it grows even in Turkish soil. Protestants are now a recognized community, with chartered rights and a legal representative. Though extremely poor, many of the missionary churches are self-supporting.

American ideas lift up the different races into higher intelligence, and induce the government to grant them greater freedom. And this has not been the work of merchants, or even diplomâts; but of missionaries. After the Crimean war, when Dr. Hamlin and others were so useful in their philanthropic labors, Turkey received her first *magna charta*, the Hatti Hamayoon; and after the late war a second one, guaranteeing in Turkey civil and religious rights unknown as yet in either Spain or Austria, or even in France. Both took the world by surprise; but they were due, not so much to treaty-makers at Berlin as to some who acted through them. Perhaps more credit is due to the American Board than to any other body. The late Rev. J. P. Thompson, a mutual friend of Count Bismarck and the Board, was requested by its officers to do his utmost through the chancellor to secure such guarantees.[3] It need not be said that Dr. Thompson's work was well done; and it is not hazarding too much to say, that, to this missionary movement in behalf of religious liberty we are

[1] *New and Old*, pp. 44-45.
[2] The name of the Christian population in Turkey; literally "the flock," *i. e.*, fed for its fleece.
[3] *Missionary Herald*, 1878, pp. 286-287.

indebted for the favorable provisions of the treaty. At present there is a Moslem reaction; but its very violence gives assurance that it is only for a time, and the stream will only acquire greater force from its temporary check. Let us possess our souls in patience; great events mature slowly, and the moral power emanating from an open Bible will not stop short of the moral renovation of the empire. Dynasties may change, races may be supplanted; but the kingdom of God shall move straight onward to its goal.

Ninety-two Protestant churches, with more than six thousand members and nearly twelve thousand pupils in schools and colleges, under the leadership of men whose personal influence reaches millions, constitute no mean power for good in Turkey.

We cannot, however, appreciate the good done in Turkey without taking into view its connection with races outside its own territory. Not only is it the great center of all Mohammedan peoples — for the sultan is the caliph, *i. e.*, successor of Mohammed, and appoints the sheikh ul Islam, who is the religious head of Moslems throughout the world — but Turkey is also the most favorable *point d'appui* for Russia. Antagonistic as those empires are, nothing is done in Turkey that is not known in Russia.

The Greeks of Asia Minor and the Armenians who occupy the northeastern frontier of Turkey along the borders of Russia, have close relations with that empire. Bibles and religious books distributed among these races on one side of the line, find their way across. They may be confiscated; but even then they are not lost, for they are thus brought into more prominent notice, and often the books themselves are sold by the confiscators to replenish their purses by the price.

The Bulgarians not only occupy the western frontier between the two countries, but they are allied to Russia by blood, language, and religion. No new life can be infused into them without at once attracting the notice of their co-religionists across the border; and as new blood infused into any part of the body is speedily transfused through the whole, and passes into every member as a portion of the life-giving circulation, so influences exerted on the Bulgarians are at once transmitted to Russia, and the effects reproduced, it may be, with even greater power, and to a larger extent, among the more numerous population of that empire.[1]

Speaking of Bulgaria, it is a fact worth noticing that when its new constitution was about to be formed, the *Zornitza*, our Bulgarian periodical at Constantinople, published translations of the constitution of the United States, and of those of several of our States. These translations were read extensively by intelligent Bulgarians; and is it too much to say that the leaven of their influence thus brought to the notice of Bulgarians, appears in a constitution more thoroughly in the interest of freedom than any other in Europe?

Hagop Matteosian, the civil head of the Protestants in Turkey, in reporting the results of a tour of observation in 1870–1871, to the sultan, under whose auspices it was made,[2] says: The Protestant community came into existence in 1848, and now numbers twenty-three thousand registered members, mostly

[1] See Dr. Hamlin, in *Missionary Herald*, 1880, pp. 295–297. [2] *Missionary Herald*, 1872, pp. 43–48.

Armenians; nineteen thousand of them in Asia Minor, and nineteen thousand four hundred and eleven in connection with the missions of the American Board. These occupy sixteen districts and one hundred and eighty-four out-stations; and in two hundred and fifty places evangelical services are held every Sabbath. While the other religious bodies in the empire are each a nationality also, and therefore most bitter in their mutual animosity, Protestantism alone, having no national character, and comprising in itself twelve different races, is disposed to live in harmony with all. A community only a few years old cannot as yet boast many men of learning; but eighty-five per cent. of the adults can read, and that indicates some progress. The social and religious institutions introduced by Protestant missions, require a high degree of intelligence in the community, and a liberal education in their leaders.

Those who have become Protestants in principle far outnumber the registered members. The indirect influence of Protestantism is greater and healthier than is apparent. The use of strong drink is very rare among the evangelical in Turkey, and habitual drunkenness hardly known. Everywhere is a great improvement in domestic relations, compared with the condition of families before they became Protestants. The healthy influence of Sabbath schools, prayer-meetings, women's meetings, and the philanthropic associations that start into existence with Protestantism, is only beginning to be felt.

The same person writing in English to the secretary of the Board, emphasizes the American type of the missionary work in Turkey. From the wild gorges of the Giaour Dagh in Cilicia to the no less rugged defiles of Bûhtan, on the borders of Persia, the missionary has served his country no less than his Master. Even in Kûrdistan are those who can reason in Yankee style, with Yankee idioms and American illustrations. Question the school-boy on geography and you will find he knows as much of the United States as of Turkey. Question him of social order, and he will tell you all men are created equal. Indeed, all the diplomatists of Europe united, cannot compete with the silent influence of missionary schools and school-books. Be not surprised if in a prayer-meeting on the mountains of Asia Minor "Old Hundred" is sung as heartily as at home.

Dr. Hamlin writes: An influence of immeasurably greater value than the churches already formed, has gone forth into communities not Protestant, and the Word of God is devoutly studied by thousands who make no change in their ecclesiastical relations. The change wrought in the religious ideas and convictions of millions tells more of the power of the work than any tabulated statistics.

In 1838 there was no newspaper in all Turkey. Now there are thirty dailies in Constantinople alone, besides seventy other periodicals; and thousands of girls are now taught, where formerly their education could not be even mentioned without giving offense.

In 1875 a converted Protestant was appointed on the imperial board of public instruction. Rev. G. W. Wood, D.D., speaks of broad avenues, flag-stone sidewalks, macadamized roadways, and handsome structures of stone and brick, with the houses numbered, supplanting the old narrow, rough lanes of Con-

stantinople, where horses and men disputed the same pathway. Railroads and telegraph wires bear witness to the great change wrought in the people themselves.

Rev. J. Y. Leonard tells of the change in the old Armenian churches through missionary influences. Pictures of saints go from the church walls to the garret; silver crosses to the crucible; auricular confession is neglected. Many superstitions are dying out, and there is a growing friendliness to Protestants, and efforts to imitate their popular education.

The improvement in domestic comfort in Turkey through the labors of our missionaries can be learned better from a comparison of the accompanying engravings than by any description. The one is an exact representation of the parsonage in Kessab, as it was in 1851, built by natives in native style, with the dunghill on one side of the only door, the door being six feet wide and five and a half feet in height, admitting loaded animals into the stable under the dwelling, with cracks in the floor overhead wide enough to let the heat of the animals up into the dwelling; and the other is the parsonage of the same church, built in 1871, under the superintendence of the missionary. It cost only fifty dollars more than the other, constantly preaches to the people of the value of a plan, draws them to a higher level of neatness, and to new ideas of the sweetness and sacredness of home.[1]

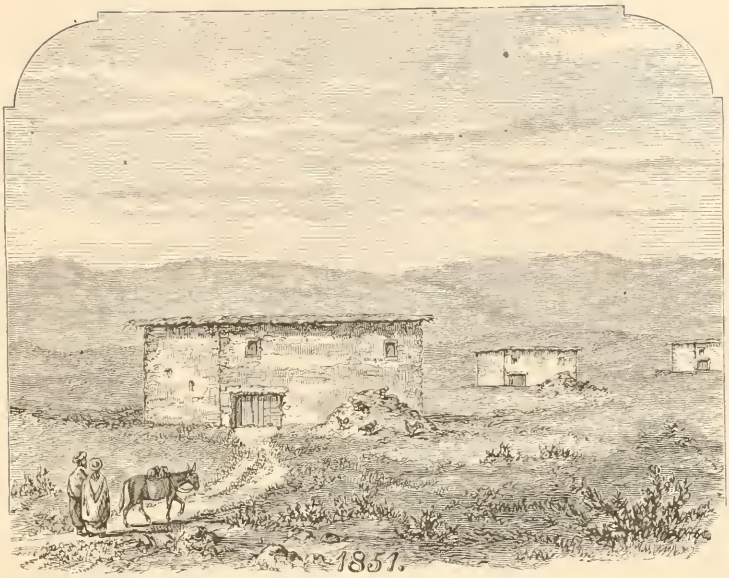
An Armenian said to Dr. E. E. Bliss: "Since you came among us a great change has taken place in our ideas of morals;" and the leaven is still working. Aspirations for liberty, and a manly standing up for the right is more common.

Rev. H. N. Barnum says: "In Eastern Turkey Protestantism is synonymous with integrity. In a field larger than Massachusetts, with five hundred thousand people in twenty-five hundred villages, we offer the Gospel as leaven, rather than as a leavened loaf, and find a large success. The churches study the Bible, and so are established in Christian doctrine. They maintain discipline better than we do at home. With great self-denial they build their churches and school-houses, and do for Eastern Turkey what the Pilgrims did for America."

Some churches in Turkey, with native pastors trained by missionaries, excel some of our churches at home in Christian activity, and the methods of working; as at Marsovan, Cæsarea, Harpoot, and elsewhere. Indeed, an efficient, self-sustaining system of both evangelization and education has been set in operation by our missionaries in Turkey, and every year becomes more efficient and fruitful in good results. As Dr. Hamlin says: "Evangelical faith always leads towards the highest culture. Not to support such institutions as Robert College, or the one at Aintab, or the more recent one at Harpoot, would be to abandon the work of evangelization."

Dr. Jessup, in his *Women of the Arabs*, says: "We can hardly imagine the degradation in which woman has lived in Syria for centuries. In the time of Mohammed some tribes buried their female children alive." In the Koran he says of some who affirmed the angels to be the daughters of God, "They blasphemously attribute daughters to God, yet wish them not for themselves."

[1] Rev. L. H. Adams, in *Missionary Herald*, 1873, p. 41.



KESSAB PARSONAGE.—1851 AND 1871.

ARMENIAN WOMEN, NORTHEASTERN TURKEY.

It is said that Othman never shed a tear till the little daughter whom he was burying alive reached up her hand and wiped the dust of the dry grave earth from his beard. In some parts of Syria today the murder of women and girls hardly attracts notice.

When Dr. Goodell went to Syria he could hear of no woman able to read. The sex was deemed incapable of learning. "Of what use would it be?" they asked. "Could she light her husband's pipe any better? or bring his slippers any sooner?" A Moslem in Tripoli said: "Educate a woman! you might as well educate a cow." Now, parents come long distances, and from their scanty incomes pay for the education of their daughters in our mission schools.

A writer in the *London Quarterly* for January, 1878, says of these schools: "The girls are selected and trained for special service as teachers, and wives of native pastors. We doubt whether the Americans are doing anything in Turkey so sure, sooner or later, to change the whole character of society as what they are doing in the education of woman." Twenty-five years ago the school-children in Aintab were paid one para[1] for each lesson given to women at home, and in this way nearly one thousand women learned to read the Bible.

So far, we have dealt mainly with the Armenians, who have been called the Anglo-Saxons of Western Asia. Their three or four millions are dispersed over Eastern Europe and Asia, half of them perhaps in Turkey, and one hundred thousand of these in Constantinople. They are an intelligent, enterprising race, and deserve a noble future. The engraving opposite shows the type of Armenian women in northeastern Turkey.

Besides these are five or six millions of Bulgarians. War desolated much of the field in 1878, but the work goes on again with fresh momentum. New England piety and Puritan ideas are steadily gaining ground; prejudice and persecution are passing away. The good seed has there fallen into good ground, and promises to yield a hundred fold.

Each of the smaller races feels more or less the impetus of the movement that promises to issue ere long in the creation of a new empire to replace the old, which decayeth and is ready to vanish away.

Dr. Jessup thus contrasts Syria fifty years ago with the Syria of today:[2] In 1826 Beirût had a population of eight thousand. There was not a school, and hardly a book; not a press, nor a carriage road, nor a glass window, nor a set of European furniture in the land. Now it counts its eighty thousand inhabitants. A mile to the west is the Syrian Protestant college. At an equal distance on the east is the Second Protestant church. The streets outside the walls are macadamized. A French diligence runs to Damascus. A London company supplies the city with water from the Nahr el kelb.[3] The new houses are beautiful specimens of Oriental architecture, with all modern conveniences, and not furniture only, but even book-cases, in almost every house. There are four colleges, five female seminaries, ninety-three schools — one third of them Protestant — with two hundred and ninety-five teachers and eight thousand nine hundred and twenty-six pupils, nearly one half of them girls. The Mos-

[1] A mill. [2] *Missionary Herald*, 1879, pp. 52–53. [3] Dog river.

lems are opening schools for themselves, for girls as well as boys; thus wheeling into line with the column led by Protestant missionaries, which is marching on to the enlightenment of Syria, and the disenthralment of woman in the East. That Moslems pay for the education of girls marks a new epoch of history.

Let us now hear from the people of Turkey the estimation in which our missionaries are held among them. A letter from the church in Redwan, at the junction of the Sert and Tigris rivers in Kûrdistan, to the American Board, requesting a missionary for that region, reads as follows:[1]

Evangelical and Soul-Loving Society, Boston, America:

We have long enjoyed your humane efforts, and the answers to your earnest prayers, as the earth does the spring rains. The good done to our nation, ourselves, and children, stirs our hearts with deepest gratitude. It will be profitable on reaching heaven to give an account of the pious and self-denying missionaries you have sent us, and the literature thus provided for us.

Before the throne we will take the hands of those of you already there, and saluting those who come after, we will make known our gratitude, and bless you. Yes, your work will make you glad both here and there. Sweet is the Gospel, and precious the Saviour whom you have made known to us. That Gospel has turned us from death to life, given us a good hope and joy unspeakable. It is our sweetest knowledge, our greatest wealth. Our Saviour has not only saved us but given us to count it a privilege to labor and pray for the salvation of others. He has won our love, and his revelation of himself to us forms our greatest joy. O precious Gospel of the grace of God.

These are its fruits here in Kûrdistan: Sixty Protestant houses, two hundred and sixty-five adherents, sixty-two church members, one pastor, three preachers, one teacher in Redwan, and four schools, three of which are taught by the preachers. During the past twelve years this poor people have spent forty thousand piasters[2] for preacher, teachers, and building, besides ten thousand piasters for the poor and other objects of benevolence. Here, and at the villages, they make every effort to advance the knowledge of the Gospel among the masses; but they are unequal to the greatness of the harvest, which waits for laborers more fit for the work. If we had had missionaries as in other places, doubtless the results had been far greater; but they come here only occasionally. The country is large and populous, and greatly needs a missionary. The population is made up of Moslems, Yezidees, Jews, Syrians, Roman Catholics, Armenians, and Greeks; all of whom speak Kûrdish. If it is too much to give us more, at least give us one missionary to labor in Kûrdistan. Faith encourages us, and your benevolence gives hope. Expectantly waiting and praying for an answer, we, the committee of this church, subscribe ourselves,

Baron Tomas.
Bedros Effendi.
Abraham, Deacon.
Kavme Ablahadian, Pastor.

[1] *Missionary Herald*, 1881, pp. 217–219.

[2] $1,760.

As the testimony of those whose position would naturally make them hostile to the work is of more force than that of its friends, a letter from a Moslem of Constantinople to an American friend is copied from the *Christian Age*, of London, April 7, 1880:[1]

"My letter is already very long, but I must add some thoughts which have crowded themselves persistently on me for the last few days. These enterprises of your countrymen, with what they, aided by others, have done for the relief of suffering during the famine last year, have convinced me: (1) That Christian philanthropy is something we Moslems neither know nor practice. (2) That the religion which produces such fruit is adapted to the wants of man. (3) That your countrymen are the best friends of Turkey, if friendship be measured by what it does. (4) That their work in this country is already too strong to be destroyed by any human power; and (5) is as sure to advance as a tree is sure to grow. It has vitality in it. (6) That they work on a principle exactly opposite to that of our government. Our theory is that the people exist for the government, the country for the capital, and all time, past and future, must avert calamity from, or add enjoyment to the present. Our proverb says: 'Let my enemy live a thousand years, so he be a thousand miles away.' But your countrymen believe in work for the people. They make Constantinople a great fountain from which streams flow to water distant gardens and vineyards; not a tank towards which they flow. With them the present is only the starting-point of labor for a better future. They are opening up oases all over our desert. When the day shall come that our people shall seek the benefit of such schools as your countrymen have founded, when our children shall be educated after their method and in their spirit, when our intellectual and moral life shall be molded by the teachings of your schools and press, and actual religious freedom make it possible for us to seek fearlessly for all the elements of power in the institutions your country has given ours, then, indeed, will there be occasion for universal rejoicing.

"SADUK EJNEBI.

"*Constantinople, 30th of Ramazan, 1292.*"

And here it is pleasant to record the friendly recognition of the leading ecclesiastic of England. The Archbishop of Canterbury, in an admirable charge recently given to his clergy, speaking of the Oriental Christians says: "No wide-spread spiritual work, testifying to our common brotherhood, has yet been done among them but by the missionaries of the American Independents. All honor to these good men for the efforts they have steadily pursued for so many years; to the quiet efficacy of which testimony is borne by the authorities of our Foreign Office."[2]

Read in this connection the following report from the Harpoot field in 1880: Twenty-one churches there contain more than thirteen hundred members. The average attendance of sixty-five congregations is at least seven thousand, and probably five sixths of this number attend the Sunday schools. The whole number of Protestants is eight thousand.

[1] *Missionary Herald*, 1880, p. 318.

[2] Do., 1880, p. 410.

The whole number connected with the schools during the year is not less than three thousand; about one half more boys than girls. The same year the contributions of the people for work at home and abroad was about $7,300; an increase of $2,000 over 1879, owing to the building going on at a number of the out-stations; and all this, notwithstanding the low rate of wages, the crushing taxation, the general derangement of business, and the famine, which promises to return and claim fresh victims in the winter of 1880–1881.[1]

Thus our missionaries shape the destiny of Turkey; and the end is not yet. Can Moslem polygamy and its degradation of woman stand before female education?

Not long since Dr. Jessup, the leading Moslem skeikh, the Russian consul, and a Greek priest were walking together, when the skeikh put out his hand and stopped them, saying, with a merry twinkle in his eye, "How is this? a skeikh, a priest, a consul, and a missionary all together, and all friends! El humd u lillah!"[2] Well might he say so, for both he and the priest could remember when they would not sit together, and neither of them associate with a missionary.[3] But the leaven of God's truth is leavening the world. About the same time the citizens of Tripoli were greatly excited over the opening of their new street railway, by Midhat Pasha. The beauty of the American cars filled them with wonder. Had the long labors of American missionaries in Syria no connection with that result? And yet the entire cost of the work of the Board in Turkey, Syria included, up to 1879, was only about $5,000,000, while the subjugation of a handful of Modocs by our government cost one hundred lives and $6,000,000. Do foreign missions pay?

In Persia we find a similar work. At first confined to the Nestorians, it now extends to the Armenians, Jews, and Moslems. A few of these last are baptized; more of them long for religious liberty, and not a few read the Bible. The larger churches gathered by the mission are self-supporting. On his return there in 1879, after eight years' absence in this country, Rev. J. H. Shedd, D.D., was struck with the advance in dress, intelligence, and manliness since he first went there in 1860. Now, native Christians command respect, and demand their rights with a manliness formerly impossible. The native church has outgrown its first foreign impress, and is developing in accordance with the genius of the people. In their church work they act out their own understanding of the Bible, and are not the imitators of any. The Nestorians of the plain may be counted as a part of evangelical Christendom. Their preachers are men of learning and independent character, and the leaven of the Gospel is working with power in that entire field.[4]

Many of the outgrowths of idolatry in India are too well known to need description; but one on the ground finds others in connection with these that are not so familiar. On one page of the *Missionary Herald* is a description of an institution called the "Pinjera Pole," in Bombay.

[1] Rev. H. N. Barnum, in *Harpoot News*, January, 1881.
[2] Praise be to God.
[3] *Foreign Missionary*, 1880, p. 469.
[4] Do., 1879.

To understand it better, we premise that the Jainas are the Buddhists of India, and maintain that theirs is the primitive faith of Hindostan, before it was corrupted by the Brahmans. They believe in one supreme God, but practically are idolaters, for they worship the images of deified men. Near Seringapatam, in one of their most famous temples, is a colossal statue of Gautama, cut from the solid rock of a hill, and seventy feet in height.[1]

The Jainas never eat flesh, nor destroy animal life for any purpose, but regard its preservation as meritorious. A rich merchant of this class, at a reported cost of over $100,000, purchased ground and erected buildings to support superannuated horses, oxen, and cows. The number of the former varies from fifty to a hundred, and the latter at the time of writing numbered a hundred and seventy-five. Ownerless dogs, too, for killing which the city government paid a reward, found here a safe asylum to the number of two hundred. Cats, monkeys, and various reptiles also shared its advantages. Indeed, it was a rule of the institution to refuse nothing that was brought. The expenses were then[2] a hundred rupees a day, or more than $16,000 per annum, in a city where thousands were suffering for want of food.

On the opposite page the same missionary — Rev. D. O. Allen, D.D. — describes a performance called "garda buggard" in connection with hook-swinging, which called together six thousand spectators. Two young people, a man of about eighteen and a woman a little older, had each made a vow to Khundoba, and were now about to fulfill them. After giving sufficient money to the servants of that idol to secure their assistance, the chief of these servants goes through with certain rites that make the idol take possession of a man. The latter now dishevels his long hair, paints his face, puts on a broad, shaggy girdle, fringed with small bells, and anklets with similar bells, and takes a large rope in his hands. Then various offerings are placed before the idol, barbarous music begins, prominent in which is a furious beating of drums. The man supposed to be possessed now begins to leap and jump excitedly, lashing now one object and now another with his rope. After drinking the liquor that had been set before the idol, he became more frantic, and demanded blood to drink, gnashing his teeth and raging wildly, as the spectators supposed under the inspiration of Khundoba. A kid of a month old, provided for this purpose, was waved before the idol and brought to him. He clutched it, and holding it by the neck, his eyes fixed on it, his mouth open, and his teeth gnashing, he ran round the temple accompanied by the music and the priests. After going round once, he let the head of the kid hang down, and seizing the throat with his teeth, began tiger-like to suck its blood. Thus, with upturned face, the kid held high with one hand, while with the other he pressed its throat to his mouth, he went twice more around the temple, till, having drained the life of his victim, the bloodless body was cast aside. The demon was now propitiated and the man became quiet, while the people crowded round, eager to touch him and so secure some share in his sanctity.

After this was finished, the man and woman, each in turn, had two strong iron hooks inserted in the muscles of the back, and were one after the other

[1] J. W. Dulles, *Life in India*, pp. 255-256; *Missionary Herald*, 1873, p. 267.

[2] 1840.

drawn up some twenty feet in the air by a kind of well-sweep arrangement fixed on a car. The car was then dragged three times round the temple by the multitude, who, after each performance, pressed round as before, eager to share a little of the supposed merit of the act.[1]

In India, Hindooism has divided its spiritual despotism with Islam. "Satan," says Dr. H. M. Scudder, "has had it all his own way here for ages. Evil influences have increased in breadth, and depth, and power, from generation to generation. The poison of centuries circulates through the spiritual system of the Hindoo. He is sunk deep in vice. Lies flow from his lips like water from a fountain. Few are faithful to their marriage vows, if, indeed, they have any. The moral degradation is fearful. Skepticism steps forth from the ashes of superstition. The country groans under the oppression of caste, which energizes opposition to the Gospel." In India slaves belonged to families more than to persons. Infanticide was common. Their modes of self-torture are too well known to need mention. Woman was forbidden to read the Vedas. She had no part in worship, and was a soulless cipher. Human sacrifices were common near Benares, and hardly more than five per cent. of the people could read. The Hindoo knew nothing worth knowing. False geography, history, and astronomy were held with the tenacity of a false religion. Even the Sanskrit contains nothing of genuine history. Its literature presents nothing of geographical science; its cosmogony is driveling fable, and of natural history it has nothing whatever. In every branch of experimental science or natural philosophy, Sanskrit is wholly wanting.[2]

But the soldiers of the Lord of Hosts have not hesitated on account of either the numbers or the strength of the enemy. Thirty other missionary societies have joined in the work. The government, also, of late, has become friendly. It fosters education. It forbids many Hindoo vices and crimes, though this also is the fruit of labor performed in spite of the old East India Company. When that forbade recruits from America, the lives of Messrs. Richards, Meigs, Poor, and Spaulding were prolonged until that order was revoked. Their work was their vindication. It made their enemies their friends. The highest officials learned to appreciate, and even eulogize their labors. Ten years ago English and native Christians in India gave to the missionary societies working under their eyes, $25,000, and the government gave ten times as much, year after year, showing how the work is appreciated by those who witness its operations and its fruits. Even a writer in the *Westminster Review* says that the results of missions in India "constitute the brightest page in the whole history of the work."

Sir Bartle Frere says that the government of India cannot but acknowledge its great obligation to the benevolent exertions of the six hundred missionaries now in India; that their blameless example and self-denying labors infuse new vigor into the stereotyped life of the great populations under its rule, and prepare them to be in every respect better men and better citizens. While he laments the hindrances occasioned by the inherited faults of the people, he says that "the whole influence of missionary teaching and example is to under-

[1] *Missionary Herald*, 1841, pp. 343–344.

[2] Allen's *India*, pp. 598–599, from *Calcutta Review*.

mine all Hindoo absurdities;" that "missionary agencies in India have brought the Gospel more fully and freely to its people than was ever true before of such an area and population," and that "whatever may be in store for the India of the future, the India of the past, frozen into forms stereotyped for centuries, can never be seen again."

Keshub Chunder Sen, though rejecting Christ, admits that "the spirit of Christianity already pervades the whole atmosphere of Indian society. We breathe, think, and move in it. Native society is being reformed under the influence of Christian education." This is the testimony of one who is not himself a Christian; and facts sustain it.

Lord Lawrence said, in 1871, that "great numbers of youth in India had an extraordinary love of learning; and that their knowledge of western literature destroyed faith in their own religion." As to the credit due to missionaries for the changes taking place in India, he says: "Notwithstanding all that England has done for the good of India, the missionaries have done more than all other agencies combined;" and such a testimony from such a source has value.

The governor of Ceylon, likewise, after personal inspection of their work, said, in 1850: "Those noble volunteers in the cause of religion and education, the American missionaries, have produced a marked improvement in their field of labor."

Sir Richard Temple, recently governor of the Bombay Presidency, who has governed one hundred and five millions of the population of India, and has had acquaintance with, or authentic information concerning, all the missionaries of all the societies laboring in India for the last thirty years, said concerning them, in an address at Birmingham, June 22, 1880: "My testimony[1] is that they are most efficient as pastors and evangelists from one end of India to the other. In the work of converting the heathen they show great learning in all that relates to the native religions, and the system of caste. They often evince appreciative thought in dealing with educated natives. As teachers they are most able and effective, and although the state educational institutions in India are highly organized, missionaries are esteemed on the whole as the best schoolmasters. In Oriental literature they are distinguished as scholars, authors, and lexicographers, and have done much to spread the fame of British culture through the East. In cases of oppression — and, in spite of our excellent rule, such cases do occur sometimes — they are friends of the oppressed. Whenever native rights are infringed or threatened they are always the advocates of the voiceless millions, and so exert a salutary influence on the servants of government. I always listened with deference to their representations on matters pertaining to the welfare of the natives. Their writings and addresses are most useful in enlightening public sentiment. They are also the active friends of the natives in times of danger. When pestilence is abroad, when famine smites down millions, they are ever present as ministering angels. They themselves help the suffering, and encourage those who organize relief. The excellence and purity of their lives shed a blessed light all around them. Their wives and daughters are foremost in every good work. Although many

[1] Slightly condensed.

of the missionaries possess talents which would win fame in secular life, they live on the barest modicum of salary on which educated men can subsist, without hope of honor or further reward. They do this from loyalty to the Master whom they serve. They do not go home on furlough unless forced by sickness, and no men have shown the heathen better how the Christian ought to die. Such conduct adds stability to British rule in India. Native thoughts of our military ambition and national aggrandizement are mitigated by the justice of our laws, our state education, the spread of our medical and sanitary science, and above all, by our efforts to mitigate or avert famine. But beyond all these I am bound to mention the effects of the example of the life and labors of Christian missionaries."[1]

As to missionary efforts for the elevation of woman in India, the *Madras Times* said, twenty years ago, that the influence of Christian female education could hardly be overrated. The natives have changed their views on this subject, and to some extent their practice, and the credit of the change belongs to Christian missions. They first established schools for girls. The Oodooville Seminary has been to Ceylon what Mount Holyoke Seminary has been to Massachusetts; and its graduates as wives, mothers, and teachers are working out the social and moral regeneration of their sex. Woman in India has learned from the missionary that she has a soul; and now missionary ladies have free access to the zenanas, where sometimes Hindoo women even hire their Christian sisters to teach them.

The Indian report on the census in 1875 says: "The education of woman in India is a recent development, due almost entirely to the influence of Christian missionaries." In 1878, three hundred girls were in our seminaries in India, and sixteen hundred in the common schools of the Ceylon mission alone. Dr. Anderson saw many graduates of the Oodooville Seminary in their own homes, and describes them as intelligent, thoroughly Christianized, evidently a blessing in their own families and in the community. All that he heard of them augured well for the future; and their number is increasing. Social life, he adds, cannot be elevated without the coöperation of woman.[2]

Christian homes, modeled after those of our missionaries, are multiplying in India, and they are among the greatest of the social forces.

The annual *Report* of the Board for 1877 says that work for woman received a new impulse from the establishment of the Home in Madura, under Mrs. Capron and Miss Sisson. Fifty girls were taught, and they had access to one hundred houses for Bible reading. Nearly three thousand cases had received medical treatment; while thousands of women were in the Sabbath congregations. The famine also greatly helped on the work.

Work for woman in India is becoming both interesting and extensive. The idea that man alone is worthy of mental and moral progress, and that woman must abide in her degradation, is vanishing, even in Hindostan, like the morning mist before the sun. Till recently, even Christians could not give their wives and daughters their proper place; but now the opportunity to help them goes beyond the power of the missionaries to improve it, and the susceptibility

[1] *Missionary Herald*, 1880, pp. 463–464.

[2] *History of Missions to India*, p. 152.

of Hindoo women to divine truth is greater than that of the other sex. During 1880 twelve hundred women in the district of Madura were regularly taught the way of salvation, and the number of that sex who have become somewhat acquainted with the truth may be estimated at twenty thousand. In the city of Madura alone Mrs. Capron speaks of two hundred and seventy-eight under instruction, and the number who listen to the reading of the six Bible women is estimated at fourteen thousand nine hundred and two.[1]

It may seem a small matter, yet to one aware of the past extravagance of the people of India in their weddings, it is a great point gained when the missionaries induce some of their people to avoid incurring a debt for the expenses of their marriage. One pastor, who was in great straits, spent less than two rupees for the wedding feast of his daughter, so as to avoid a debt, though, as he afterwards said, it cost him "pain greater than death." One of the girls of the school in Bombay was about to be married, and a missionary lady offered to help her, provided she incurred no debt. So bride and bridegroom were furnished with a plain wedding dress, and one for daily use besides. A modest dinner was provided. The girl made part of her own dress, and some friends joined in procuring some simple furniture for kitchen and parlor, not forgetting some books. This was in such contrast with the vain show and glitter of native weddings, and the inevitable debt involved, that the missionaries felt it was progress in the right direction.[2]

A hostile press labors stoutly to buttress the falling fabric of idolatry and misrepresent the Gospel. Missionaries are reviled, and native converts persecuted; but the people read the Bible and contrast the spirit of the missionaries with that of their opposers. A Brahman compared them to the mango tree, stoned as long as any fruit remained on it, but still bearing fruit year after year. "I have watched them well," said he, "and like that tree they bear fruit for the good of others. Their Bible leads them to do this. There is nothing like it in all our sacred books for holiness and love, and they bring it to us, that we may raise ourselves by the same power that has made them what they are. They do not force it on us, as the Moslem does the Koran, but bring it in love, and bid us study for ourselves. One thing I am sure of: oppose it as we will, sooner or later the Christian Bible will regenerate this land."

Idolatry is waning. New temples are not built. In many cases the temple officials must buy in the bazaars the things needed for their worship, for they are no longer given by the worshipers. In one temple where two hundred sheep used to be sacrificed every year, in 1872 only one or two were offered. In many places idol festivals have been abandoned. Of course idolatry will not die easily; yet some power causes its disgusting rites to cease, and plants in its place the decencies of a Christian worship. A beneficent change is being wrought in the national character, or, as was said at the annual meeting of the London Wesleyan Missionary Society in 1870: "The progress of missionary labor through India is the track of a river through a desert, and everything liveth whithersoever that river cometh."

Though American Christians do not give more than $200,000 annually for

[1] *Annual Report of the Madura Mission for 1880.* [2] *Rep. of the Am. Marathi Mission for 1880.*

the regeneration of India, yet the ninety-four thousand belonging to the native congregations in 1851, in 1861 had become one hundred and thirty-nine thousand, and in 1871 more than two hundred and eleven thousand, and their progress in self-support and beneficence was in even greater proportion.

If we cannot report such marked results in China, there are reasons for the difference. The Board has been criticised for not entering sooner so large and populous an empire. But our missionaries besieged China for years before they were allowed to enter her borders in 1842; and now, though many are at work, there is still much opposition. There is a strong national dislike of change, especially when introduced by outside barbarians. Ignorance, superstition, and, most of all, vice, stand in the way of progress. How can so vast an empire, and one so arrogantly exclusive, wheel at once into line with the rest of the world? It is painful to speak of another obstacle, for which a Protestant nation is chiefly responsible. The use of opium in China is indeed of long standing; but not till about the time of our Revolution did it begin to assume its present fearful proportions. Then the East India Company set itself to work to increase its income by fostering the use of opium in China. The government prohibited its introduction, and the two vessels importing the first cargoes carried one fourteen and the other thirty-six guns, thus forcing it on the Chinese at the mouth of the cannon. Dr. Osgood, of Fuhchau, wrote in 1872: The people say to missionaries, "You brought opium and forced it upon us." Its use increases every year. In 1870 about sixty-six million pounds were imported, valued at $320,000,000. Dr. Osgood estimates that one hundred millions of Chinese are made wretched by its use. Dr. A. O. Treat said that for every dollar England spent in sending the Gospel to China she sent $200 in the form of opium. Is it strange then if its blighting influence is felt in millions of families that never hear of the Gospel? He estimates that one half the population suffer more or less from the drug. Rev. I. Pierson says: "The church spends $600,000 annually for the salvation of China; but merchants from Christian lands take from her one hundred times that sum every year in exchange for six thousand tons of a drug which entails a curse that cannot be described." At Fuhchau, however, Dr. Osgood treated eight hundred cases of opium-smoking in two years, and thought that ninety cases out of one hundred may be cured. But what is the proportion of the cure to the disease propagated by so-called Christian people for the sake of gain? Small as it may be, however, it shows the working of Christian missions in promoting human well-being, in striking contrast with some of the workings of commerce. Take away the influence of missions from commerce and what would it be as a power for good to heathen lands?

The commissioner of the Chinese government said, in 1843: "If English merchants would only bring lawful articles they would reap an ample profit. Why, then, should they persist in selling this baneful drug?" Its sale in 1876 was in the proportion of twenty-eight millions of opium to twenty millions of cotton goods, and four millions of woolens, while China paid for opium as much as she received for her tea and silk.

This immense importation only stimulates home cultivation. Three of the eighteen provinces now redden with the poppy every year, and a missionary in Soochow says that in that city opium shops during thirty years have increased from five to five thousand. The drug seems to have the same fascination for the Chinese that fire-water has for our Indians.[1]

In 1846, Rev. Mr. Pohlman estimated the number of opium shops in Amoy at one thousand, and the annual cost of the drug at $12,000,000, while its effects were absolutely appalling.

A letter from the province of Shensi, dated August 14, 1880, says: If any would see the evils of opium, let them spend a week here, and listen to the daily histories of women who try to put an end to their lives on the most trivial pretexts. Mr. King is this moment called to another case. One little girl of seven followed the example of her seniors, but happily failed to succeed. *Opium is sold in two hundred places on this short street!*[2]

And here it ought to be mentioned to the credit of the Chinese government, that in all its poverty and pressing need of larger revenue, it has never consented to levy an import tax on opium; thus showing the sincerity of its opposition to the introduction of the drug, and setting an example to Christian governments which derive a revenue from intoxicating drinks.

The social and moral degradation of China need not be dwelt on when some would close our sparsely peopled territories to the Chinese, for fear of pollution. The semi-civilization of China has not made its people virtuous; government has indeed some good features; but it is no exaggeration to say that in China is neither national virtue nor national conscience.

Rev. C. Holcombe says that not more than six per cent. of adults can read and write, thus making the people capable of receiving the puerilities of Buddhism, which is not the power for good that some in Christian lands would have us suppose. He testifies from his own personal knowledge that it is a cruel and debasing bondage, an unclean idolatry. Its teachings lead to casting out dead children to be fed to dogs. The better classes reject it for Confucianism. So far from honesty being the characteristic of officials, according to native estimates seventy-five per cent. of the revenue is stolen by those through whose hands it passes, or more than several times the amount of all their salaries. He represents the empire as a whited sepulcher, full of dead men's bones and all uncleanness.

The missionaries slowly undermine idolatry and introduce the renovating power of the Gospel into the corrupt mass of the people. The Chinese appreciate Christian science, and learn the Gospel for its sake, so the Gospel enters to suppress vice and crime, a result which all the frightful frequency and severity of their punishments have failed to effect.

Though in Amoy the poor destroy one half of their female children at birth, yet one missionary says that idolatry is sustained in China mainly by women; and another affirms that the conversion of one woman is worth that of two men, for she is almost sure to bring in her husband and children, and our mis-

[1] Rev. J. L. Ewell, in *Missionary Herald*, 1880, pp. 217–218; also Rev. I. Pierson, do., 1877, pp. 75–78.
[2] *Missionary Herald*, 1881, p. 96.

sionaries there have already done much for woman. The evil of her present degradation is being arrested, and a change of public opinion is being brought about that promises a complete revolution in her position and domestic life.

We have seen our missionaries giving to the Chinese empire a Christian literature. Hitherto it has chiefly been foundation work, but it has been making itself gradually felt. In Wylie's *Memorials of Protestant Missionaries* the list of publications up to 1867 contains two hundred and forty-two separate headings; and there were over eight hundred different publications in Chinese. Presses have been connected with American missions at Canton, Singapore, Fuhchau, Shanghai, and Peking. In some of these places the natives now carry on the work with skill and profit. Very few Chinese works have been issued by foreigners who were not missionaries. At our Centennial Exposition, in 1876, one thousand and forty Chinese works were on exhibition, all the work of Protestant missionaries. Seven hundred and fifty-three were in the general language, and the rest in the dialects. The Presbyterian press at Shanghai issues thirty million pages annually.[1]

Rev. C. Hartwell speaks of the Chinese as strong, physically and mentally, and though slow, yet ready to accept foreign ideas when they see their value. The government is becoming more favorable to the residence of foreigners; has arsenals, armories, and shipyards under foreign superintendence; and besides a naval and torpedo school, has also a school of telegraphy. It has built twenty steamers at Fuhchau, which are supplanting the old junks. The "China Merchants' Steam Navigation Company" runs thirty-three fine steamers along the coast and up and down the rivers.

Rev. J. W. Wiley, D.D., a Methodist bishop, who was a missionary at Shanghai from 1851 to 1854, and revisited it in 1877, thus describes the change:[2] "Then Shanghai was just becoming a port of foreign trade. A few inferior hongs extended along the river, which was crowded with junks of all sizes. Now, as we entered the river we saw a huge fort, constructed by foreign skill, according to foreign ideas. Further up was an arsenal, where natives, guided by foreigners, manufacture all kinds of fire-arms. Near it is a ship-yard, where they build steam and sailing vessels, and gun-boats. Two of these last, built entirely by Chinese, lay here at anchor. Few of the old cumbersome junks are to be seen; they have been displaced by steamships, many of them owned by a native company. The harbor presents quite a foreign appearance, with beautiful villas along the banks, and above these a magnificent foreign city, with as fine buildings as one would wish to see."

Dr. Blodgett reports[3] that the Chinese government is about to connect Peking and Shanghai by telegraph, driven to this step by the necessities of their foreign relations.

Dr. Wiley thus presents the religious contrast at Fuhchau: "Twenty-three years ago there was not one merchant here, the foreign trade being confined to two opium shops at the mouth of the river. Now, I find a large mercantile settlement, full of elegant residences and busy hongs. Then, there was not a native Christian. Now, in this city are three large churches connected with

[1] Dr. S. Wells Williams, in *Presbyterian Review*, 1881, pp. 39, 41.
[2] *China and Japan*, p. 44.
[3] *Missionary Herald*, 1881, p. 70.

our own mission, besides several of other missions. Then, we had no right to go five miles beyond the city. Now, our missionaries and native preachers have their circuits reaching a hundred and fifty miles north and west, and two hundred south and east. Now, four thousand Christians are in the three missions, and in one assembly I met eighty native preachers and between two hundred and three hundred native Christians, representing more than two thousand church members, ready to be organized into a conference." [1]

Chan Laisun, Chinese commissioner of education in this country, was a former pupil of Rev. Ira Tracy. Yung Wing, now associate embassador at Washington, was educated by missionaries in China, brought to this country by Rev. S. R. Brown, D.D., and placed in Monson Academy, where he became hopefully converted. He graduated "with honors" at Yale College, which has also given him the degree of LL.D. He returned to China, devoted himself to education, and rose to be a mandarin of high rank. It was mainly through the influence of these two men that the Chinese government now sends young men to this country for education. One hundred and twelve were here for this object in 1878. So do missions uplift China. What a contrast between the time when our missionaries were shut up to the "thirteen hongs" at Canton, and today, when they can reside in towns and cities throughout the land, and witness such results of their labors!

These facts indicate that in the march of great social and moral forces there, the Christian element is prominent as a regenerating power. The temples in North China, except those of Confucius, are going to decay. And his ideas retain their hold on the people, not so much as a system of faith as a help to civil service. In place of the temple will rise ere long the church, adapted to the spiritual wants of all.

The bishop of the English church in China wrote, in 1859, to the Archbishop of Canterbury: "The friends of missions on both sides of the Atlantic should know how much they are indebted for the Christian element in the late treaties with China, to his Excellency W. B. Read, American embassador, ably seconded by his secretary of legation, S. W. Williams, LL.D., and Rev. W. A. P. Martin, D.D. Mr. Read shows the favorable impression made by missionaries on the Chinese when he says: 'While the American negotiations were in progress the imperial commissioners, of their own accord, offered to concede to missionaries free access to all parts of the empire, but I could not allow the recognition of a class. All should enjoy the same privileges, as they now do.' So it was the favorable impression made by our missionaries that secured that article in the American treaty. And its appearance there was made the ground for repeating it in the treaties of other nations also.

"On leaving the country, Mr. Read acknowledged his indebtedness to missionaries for important aid in securing the result of his negotiations, and adds: 'In my despatches home I have spoken of my high obligations to American missionaries, without whose practical aid I could have done little, and to whose good example, making a favorable impression on the Chinese, what is called diplomacy owes much. The missionary is never in trouble here by his own act. He is never importunate for aid, nor clamorous for redress. He is never

[1] *China and Japan*, p. 223.

querulous, and your kind address shows that he is ready to do a public servant more than justice when his work is done.' If such is the character of our missionaries, and they reproduce it in their converts, how can they help 'shaping the destinies of nations for good?'"

The article in the treaties with China granting toleration to those who preach, and to those who receive, the Gospel, and allowing the public exercise of their faith, is a decided mark of progress. Comparatively little persecution for Christ's sake has taken place in China, yet three Protestant converts have sealed their testimony for Christ with their blood, and others have suffered the loss of all things for his sake. The reputation of the converts has generally been good. Dr. S. W. Williams once said to the Premier Wansiang that he had never known any of the Yesu kiao[1] convicted of crime by the native courts, and the premier replied that he had never heard of a single instance. In the Shantung outbreak, in 1874, when Mr. Corbett was attacked, a most rigorous examination failed to prove one act of violence or sedition against the converts, though they were placed in very aggravating circumstances.

The proceedings of the Shanghai conference were published in a volume of five hundred pages. This gives the statistics of twenty-seven societies laboring in ten provinces, occupying ninety-two stations and five hundred and thirty-two out-stations, manned by four hundred and seventy-three persons, or, omitting wives of missionaries, three hundred and one laborers. The presence of so many Christian families in a land where the family is so honored, and where all the previous ideas of Christianity were derived from Nestorian and Papal celibates — in that point resembling the Buddhist priests — is an element of power not always appreciated as it ought to be. A summary of their most important departments of labor is contained in the following table:[2]

	American.	British.	Continental.	Total.
Foreign laborers	212	228	26	466
Churches	150	156	12	318
Churches self-supporting	11	7		18
Churches partly self-supporting	115	149		264
Male communicants	3,117	4,504	687	8,308
Female communicants	2,183	2,440	584	5,207
Boys in thirty-one boarding schools	347	154	146	647
Boys in one hundred and seventy-seven day schools	1,255	1,471	265	2,991
Girls in thirty-nine boarding schools	464	206	124	794
Girls in eighty-two day schools	957	335	15	1,307
Students in twenty-one theological schools	94	120	22	236
Scholars in one hundred and fifteen Sunday schools	2,110	495		2,605
Ordained pastors and preachers	42	28	3	73
Assistant preachers	212	273	34	519
Colporteurs	28	46	3	77
Bible women	62	28	2	92
Churches and chapels	206	367	40	613
Hospitals	6	12		18
Hospital, in-patients, 1876	1,390	3,905		5,295
Hospital, out-patients, 1876	47,635	41,170		88,805
Medical students	19	13	1	33
Native contributions, 1876	$4,482	$5,089		$9,571

[1] Jesus sect; the Chinese name for Protestants.

[2] Dr. S. Wells Williams, in *Presbyterian Review*, 1881, pp. 46–48.

Ten of the twenty-seven societies there represented had, in 1877, eight thousand seven hundred and forty of the communicants then reported, and in the beginning of 1880 these same ten societies had twelve thousand three hundred and forty-four, a gain of over forty-one per cent. At the same rate the whole twenty-seven would have not less than eighteen thousand three hundred, and the accessions of the year 1880 promise to exceed anything known before.[1]

If we pass over into Japan, the character of the people, as our missionaries found it, in some respects was not promising. Many religious festivals were noted for disgusting obscenity. Parents sold their daughters in opening womanhood for the vilest purposes. Public baths were used promiscuously by both sexes. Obscene pictures were freely exposed for sale. Neither Buddhism nor Shintooism promoted purity and righteousness, while truth and equity had fallen in the streets.

Protestant missions there date only from 1859, when, after the fall of the Shogûn, and the restoration of the Mikado to temporal power, the salt of divine truth could be thrown most effectually into the seething caldron of society. In December, 1871, after only one year's residence, Rev. J. D. Davis wrote of the wonderful changes wrought in that short time. The first railroad had been opened. The ends of the empire were united by telegraph. The Yetas — the pariahs of Japan — had been made citizens. The prohibition of promiscuous bathing, of the sale of vile pictures, and of the sale of daughters for the purposes referred to, followed in rapid succession, like the broadside of a man-of-war.

As to education in Japan, as early as A. D. 300, Chinese scholars were brought over to train up men for public stations. After that, Japanese were sent over to be educated in China. As early as 1861, a number were sent to Holland for education, but in 1871 the department of public instruction was organized. The minister of education has under him several bureaus, each with its own work. That of superintendence oversees the schools; another has charge of the business of the schools with the department, and the appointment of teachers; that of medical affairs has charge of the schools of medicine; that of reports attends to statistics, the collection of information about foreign schools, and the preparation of school-books; that of finance sees to the distribution of the annual appropriations. Each school is managed by a director, who is responsible for its success.

The empire is divided into seven grand school districts, each with institutions for the higher instruction. These are subdivided into middle, and again into elementary districts. There were forty-five thousand of these last in 1874. In 1875 there were thirty thousand schools and two million pupils. The sources of income in 1874 were: school fees, district rates, voluntary offerings, government appropriations, and the interest of various funds; amounting in all to $3,794,123 in gold; with property in buildings, grounds, books, and apparatus, valued at $5,740,248. Normal schools have been organized in each grand district. The education of woman was in part provided for by the

[1] *Missionary Herald*, 1881, pp. 95-96.

empress, who erected a building, dedicated in October, 1875, for a female normal school.

At important centers are schools for foreign languages. In each grand district is an English school.

A national university was organized in 1873. To enter, one must have a good knowledge of English, Japanese, and Chinese; must know arithmetic, geography, the history of Japan, and of western nations. The course of study extends through six years, the last three being devoted to professional training. The first three years include languages, mathematics, history, physics, natural history, political economy, and Latin. The special courses have separate colleges, as of law, engineering, and chemical technology. There is also a school of arts and manufactures. The number of students in 1874 was three hundred and forty-nine. There is also a military, naval, and medical college.[1]

More recent accounts give eight grand districts, thirty-two middle districts, and two hundred and ten academies in each, and a total of fifty-three thousand seven hundred and sixty common schools. From each grand district one hundred and eighty boys are selected and sent abroad to complete their studies. Thousands of English books are imported and translated.

Sunday has been proclaimed a day of rest, and soon after the edicts against Christianity were repealed, the Buddhist temples were secularized, and their bells, many of them, exported for old bronze. The first church was organized March, 1872, with nine members; and now twelve of the seventeen churches in connection with our own mission are self-sustaining.

Rev. M. L. Gordon, of Osaka, asks, Why send the Gospel to Japan? and answers thus: "Not to civilize its people, though it elevates their civilization; not to give them western science, nor agriculture, mining, and engineering, though Christian men are their best teachers in these things; not to give them railroads and arsenals, mints and post offices, these they have already received from us; not to teach politeness to the politest people on the globe, though the Gospel will add sincerity and disinterestedness to their politeness; not merely to improve their morals; but to bring them back to God. As blind Yaminamoto said: 'I love your railroads and the like, but more than them all, my country needs the hearts of its people to be made new.'" And so when we hear of three hundred young men in the training-school in Kioto, already repeating the Gospel story in fifty places in that city; when we read of three churches there, part of them already self-sustaining; when we find the girls' school there already full, and stations in the suburbs budding into churches; when native pastors themselves organize new churches, and ordain pastors over them with a wisdom and care truly admirable; when at Kobe, where ten years ago no Christian could be found, now ten churches are organized for aggressive work,—we feel that the future of Japan is assured, and that it will not need many years to furnish material for a much fuller account of the influence of missions in shaping the destiny of Japan.

The pastors have increased to ten, and set to their people an example in self-denial, some accepting for salaries one fifth, or even one tenth, what they

[1] *Missionary Herald*, 1877, pp. 108-112.

might receive in government service. There were laboring in Japan, in 1879, ten missionary societies from America, and six from Great Britain, if the Canada Methodist mission may be counted one of these, otherwise, there are eleven from America and five from our mother country, and in connection with them all one hundred and seventeen missionaries, seventy-seven of them ordained, with sixty-four[1] churches and two thousand seven hundred and one[2] members.[3]

Edward Irving cites England as an instance of the power of the Gospel to regenerate the most brutalized of men. Before it came, he says, "She had no art but the art of war, no literature save her songs, and little government of law. Torn by intestine feuds, she was either in vassalage or misrule. Her soil niggard, her climate stern, she was a desert of misty lakes and hoary mountains; yet no sooner did the breath of the living oracles breathe on her, than 'the wilderness and the solitary place became glad, and the desert blossomed like the rose.' Through that same truth missions bring out the thinking man from the human animal, like metal from the ore, and the missionary village dwells amid the surrounding wastes of idolatry like the tabernacle of God in the wilderness of sin." Had England driven Christianity from her coast, never could she have attained her present position in commerce, art, and literature; and still the foundation that bears these up is the Gospel. Nations prosper in proportion as men regard the welfare of each other as of equal value with their own. Islam and Popery never yield this fruit; but in the missionary field the Gospel has often done more towards it, in a few years, than all other means combined in many generations.

Our missionaries go abroad to impart all that is good in our Christian civilization to other lands. In diffusing our ideas of the true office of government they secure the rights of the people, and kindle a spirit of patriotism where previously it was unknown. In disseminating our ideas of human rights they throw new safeguards around property, and reveal the sacredness of human life. They carry our free popular education to quicken intellectual life; bring out to view the inherent evil of vice, slavery, and polygamy; elevate men's ideas of comfort, and so promote industry; they lift up woman from her degradation to her true place in the family; and so work out a nobler destiny for man wherever they go, even in this present life.

[1] Page 59 says sixty-seven.

[2] The editor says (p. 71) three thousand five hundred.

[3] *Missionary Herald*, 1881, p. 71.

XXII.

PHILANTHROPY.

FAMINE RELIEF.

In writing of the temporal benefits of foreign missions in the year of grace 1880, it would be unpardonable to overlook the thousands of lives that have been saved from that most lingering death, a death by starvation. The terrible famines that within the last few years have destroyed so many in distant parts of the earth, would never have been heard of by many but for our missionaries, who, living in daily contact with the sufferers, made known their distress and implored relief. Twice has the scourge devastated Persia; once in 1871, and again in 1880. Turkey has suffered as often; first in 1874, and now, even while the pen traces these lines. India has not fallen behind, either in the number of her victims or the severity of her distress, and in 1878 a famine among the teeming millions of China, appalled us by the magnitude of the calamity that swept whole provinces literally with the besom of destruction. In all these cases the appeals of our missionaries did not fall on unwilling ears. Large sums were contributed by those who had confidence in their statements, and also in their integrity and discretion in the distribution of the funds. Men would not have given so freely had they questioned either, and if any doubted whether they could give to this object, and at the same time contribute to the spiritual work, the fact that every cent they gave opened the door wider for the entrance of the Gospel, led them joyfully to deny themselves in order thus to benefit both the bodies and souls of their fellow-men.

The same confidence in our missionaries led merchants and others in lands desolated by famine, who saw the need of relief and the way in which it was given, to supplement our contributions with their own; and though no one claims that we might not have done more, and rescued a larger number from the grave, yet the fact that the sufferers themselves appreciated the kindness, and that the missionary work was never so prosperous as in those communities that suffered the most, and immediately after they received help from missionaries when their own co-religionists had left them to perish, bears witness to the manner and spirit of the work better than any parade of the sums disbursed. And all was done without one cent of expense either in the collection

and transmission of the funds, or of their distribution among the sufferers, though that involved long journeys and much exhausting toil.

In the famine of 1878 in China, some of our missionaries went from house to house snatching men from the jaws of death, and now they are invited to preach the Gospel that prompted such beneficence. In one or two places men actually bowed down and worshiped them; and from one temple the idols were removed by their worshipers, and the building given for the preaching of the Gospel.[1]

That these general statements may be appreciated, look at a few facts as reported by our missionaries. In Honan men were living on a cake made of the sorghum plant, seeds, stalk, root and all ground together, enclosing a ball of stewed willow leaves.[2] Children a year old ate ground cotton-seed cake, an article generally used as top-dressing for land. Old men chewed the chaff of hayseed, ground with dried willow leaves to give it a relish. Elm bark was ground with broom seed and chaff meal to make it tenacious enough to cook. Some houses were torn down, that the timbers might be sold for bread, and others were filled with the starving and dying, while the road sides were strewed with the unburied dead.[3] Let that suffice for a glimpse of the condition of the people of three provinces — Honan, Shansi, and Shensi — estimated at not far from fifty millions.

As it will both exhibit the nature of the suffering in another field and the character of the relief afforded by our missionaries, let us look in on Mrs. Sarah B. Capron in her work at Madura. A woman of the weaver caste had a husband and seven children. When Mrs. Capron first saw her, four of the children had died of starvation; everything in the house had gone; and at length the house itself had been sold, and they were living in a shed belonging to a relative. One morning she brought a little girl five years old, laid her on the floor, and sat down as one would sit beside the dead, speechless. The child, fearfully bloated, did not even open its eyes. Says Mrs. Capron: "I laid my hand on her head and said, 'Now tell me all about it.' She did not look up, but said: 'One child died last night. They carried it away. We had no money. I had heard of you. I thought, "She won't know me, and will not help me," but I have come.' 'Has the child no father?' 'He is nearly as sick as this child. He said: "Tell the lady that I am sure if I could only get food I would get well."' The mother was emaciated to the last degree, with scarce a shred of clothing left, though her manner showed she belonged to the better class. I told her frankly that her child could not live, gave her clothing, rice, and money, and promised her that as long as I had anything she should share it.

"Next morning she brought another child; not a tear in her eye. I dared not ask a question. She laid down a girl eight years old, and said: 'She died this morning, as you said, and they carried her away without a funeral, and she so fair. Why do we suffer so?' 'Why did you not tell me of this one yesterday?' 'I could not bring two, and I thought there was more chance for the other; there is none for this one. I only bring her to show you that I tell

[1] *Missionary Herald*, 1879, pp. 138–141. [2] Do., 1878, p. 81. [3] Do., 1878, p. 266.

the truth.' 'Have you any more left?' 'My husband and a boy thirteen years old.'

"I determined if care, food, and medicine could save them it should be done, and yet even now I had ten others from the same caste, each with three or four children, and her own special tale of woe. Next morning she came again, and, poising her arms as if carrying a child, said: 'My arms are empty now. She died this morning. At midnight she called, "Mother," and I said "My child;" but it was dreadful to have no oil for a light when your child is dying. If we had known about you before, she might have lived. It was only food we needed. I hope you will forgive me, but I would like a funeral for her.' 'What would you like?' 'The cloth you gave will do. I should like to buy fuel for the pyre; nothing more.' It required thirty cents. I gave it, and not till then did she shed a tear. Recovering herself a little, she looked up gratefully, and said: 'You don't know how I wanted this, and how little I expected you to give it for the dead, when there was not enough for the living.'

"Today she, her husband, and son were here. He owns a loom and weaves diligently for me, I furnishing the thread. The mother has needed constant care, but is doing well. The son has had a long fever, and is still frail."[1]

This is only one leaf out of a long chapter of which no friend of missions need ever feel ashamed.

Rev. R. M. Cole, of Erzrûm, Turkey, in a letter dated September 11, 1880, gives a sad account of privation along the headwaters of the Eastern Euphrates.[2] Though $4,230 had been distributed in eighty-nine villages among nine thousand four hundred and ninety persons, yet that was soon consumed, and of the crops sometimes a quarter was stolen before it was ripe enough to reap, little children at night devouring the raw grain like cattle, in spite of the guards that were set to watch it. It speaks volumes for our missionaries that Mr. Cole was appointed a member of the Ottoman commission, made the depositary of its funds, and even the governor-general of Erzrûm was required to pay over to him the moneys sent by Turks from other parts of the empire.

It was a striking fact, also, that of the twenty thousand who died during the famine, forty of the robber Kûrds died to one Christian, seventy-five per cent. of their flocks having perished. Some of the native Christians remonstrated against feeding men so ready to slay the followers of Christ; but the missionaries held firmly to the principle of giving to all alike according to their need.[3]

WAR.

Though no Christian nation has yet reached the point where it learns war no more, heathen tribes are more frequently at war. Slighter provocations bring it about. It is prosecuted with more ferocity, and without those amenities that mitigate its horrors in Christian lands. In this respect missionaries occupy a position that gives them unusual opportunities for doing good. Sometimes they are able to prevent a conflict, and even when they cannot do

[1] *Life and Light*, 1878, pp. 199-201. [2] Murad Chai. [3] *Missionary Herald*, 1880, pp. 502-504.

that, they may succeed in divesting it of some of its savageness, or diminish the number of its victims.

Instances of this kind have occurred within the personal observation of the writer. It has already been shown that when Badir Khan Bey led his Kûrds against the Mountain Nestorians, he promised Dr. Grant that Tiary would be spared for his sake, and though Mar Shimon did not put much faith in the promise, yet it was kept to the letter. While other districts were laid waste, that was passed by; and not till the men of Tiary made an unadvised and foolhardy attack on the Kûrdish garrison, was the valley of Ashitha laid waste.

In the following spring, when the Druses attacked the Maronites of Abeih, Dr. W. M. Thomson, at no little personal risk, effected a cessation of hostilities between the Maronites in the strong castle of one of their leaders, and the Druses, who would soon have starved them out or stormed their stronghold. Nor did he cease his good offices till he saw them safe on their way to Beirût under the protection of the British consul-general.

It was a curious illustration of the power of missionaries for good, that in a later war between the same parties in the same locality, the house of Dr. Calhoun was filled for six months with the silver ornaments and other precious things of the Maronites, left there without either receipt or written pledge of any sort, to save them from the Druses; and no sooner did the appearance of French ships of war in the harbor of Beirût embolden their owners to take them away, than the Druse women hastened to place their valuables in the same place of safety, fearing the retribution which might follow. They who thus equally command the confidence of opposite parties in a civil war, cannot but greatly alleviate its horrors, and be sources of great temporal blessings to all around them.

A Zulu chief came one morning to the house of Rev. N. Adams, M.D., very much excited by the aggressions of white men, and breathing out rebellion against the government. The good doctor called him in and listened patiently to his grievances, then calmly advised him to seek redress in a better way. The chief thanked him, and went away in a very different spirit from that in which he came. The colonists at Natal did not know how much they were indebted to Dr. Adams for their safety; but Sir Theophilus Shenstone, long secretary for native affairs in the colony, knew of so many such incidents, that he once said, in the hearing of Rev. J. Tyler, that he attributed the unbroken peace which had continued there for nearly thirty years, in a great measure to the influence of the missionaries. "I think more of missionaries than of soldiers to keep savages quiet," said Sir Peregrine Maitland, governor of the Cape of Good Hope, in 1844, when he told Rev. A. Grout to go back to the work from which the Board had recalled him on account of the then existing war. He did go back, and was supported for a time by the government, who knew that that was the cheapest way to keep the Zulus quiet.[1]

Even at this moment of writing, the evening paper[2] contains the following telegram from Teheran, Persia: "The fugitives from Oroomiah report that

[1] Rev. J. Tyler, in New York *Observer*, July 15, 1880.

[2] November 1, 1880.

Sheikh Abdullah — the chief of the invading Kûrds — sent notice to the American missionaries in that town, requesting them to raise the American flag above their premises, that they may be respected when the city is assaulted by the Kûrds."

[The author had just finished correcting the proof-sheets of this chapter, when, on leaving the office, he met Rev. Mr. Tyler on the stairs, and naturally thanked him for the fact mentioned above. Mr. Tyler replied, "That is only one fact among many. When I was leaving South Africa, Mr. Williams, a magistrate in Natal, wrote me a letter of thanks for the good order maintained among the natives in my field during the twenty-two years of my stay among them; 'for nothing,' said he, 'but missionary influence could produce such results.'"]

SUTTEE.

A brief notice of suttee in India may not be out of place in a volume whose object is to recommend missions on the ground of their secular benefits.

A suttee is the burning of the living widow on the funeral pile of her dead husband. The *Rig Veda* says: "O fire, let women with bodies anointed, eyes covered with collyrium, and free from tears, enter thee, that they may be united with excellent husbands, be sinless, and jewels among women." Other sacred books say: "The woman who ascends the funeral pile of her husband will spend as many years with him in heaven as there are hairs on the human body. She purifies the family of her father, her mother, and her husband. There is no virtue greater than this. As long as a woman declines burning herself, like a faithful wife, in the same fire with her deceased lord, so long shall she be born again in the body of some female animal; but every woman who does this, shall remain in Paradise with her husband thirty-five millions of years. If the husband die at a distance, let her take his slippers, and binding them on her breast, enter a separate fire." The practice, then, is of very early origin, for the Vedas were written at least 1300 B. C., and eight of the widows of Krishna, one of their favorite demigods, are said to have burned themselves on his funeral pile. The inexpressibly forlorn and despised condition of widows in India may have had more power to reconcile women to this horrible fate, than all these promises of their sacred books. No Hindoo government has ever been known to hinder the suttee. Indeed, it prevailed most among kings, Brahmans, and the upper classes. The Mohammedan Emperor Akbar forbade it in the fifteenth century. Dr. Carey was the first to search out the extent of the practice in Bengal, and he found that four hundred and thirty-eight widows were burned alive within thirty miles of Calcutta in 1803. In 1818 the number officially reported in Bengal was eight hundred and thirty-nine, and during twelve years[1] seven thousand one hundred and fifty-four in Bengal only. There is no way of ascertaining the number in the whole country. They have been estimated at three thousand annually.

In 1813 the East India Company interfered so far as to learn whether the act of the widow was perfectly voluntary. This, while it did not much diminish

[1] 1815-1826.

the number, threw the shield of the government over the sacrifice. In 1829, Lord William Bentinck enacted in Bengal that any participating in the act should be punishable for murder, and from that time the abolition of the suttee was inserted as an article in treaties with native tribes. Thus the practice which had existed for three thousand years virtually ceased. It was one of the worst features of this cruelty that girls who had not yet become old enough to live with their husbands — they are often married at seven years of age — furnished victims for the suttee. Polygamy also increased the number. Instances are on record where as many as twenty-five perished on one funeral pile.[1]

Now, while we are thankful that the providence of God sent a government to India which, even at so late an hour, put an end to these holocausts, the question arises, would it have been done even then, but for the efforts of missionaries, who took the lead in bringing the horrid facts to public notice, and preached against them in the vernacular, while they protested in vigorous English against the sanction given to them by a Christian government?

But while the slower and more thorough process of diffusing the Gospel was in this case anticipated by the strong hand of power, it may well be questioned whether, should the Gospel be removed, the return of these horrors could be prevented even now in India. Fifty years ago a society was formed of influential native gentlemen in Calcutta, to defend this practice, and they established a periodical for that purpose; but through the growing power of the Gospel there, both the society and its paper have disappeared; and it is only that same Gospel that renders the re-establishment of such a society impossible in that city today.

CASTE.

The matter of caste, however, brings out the beneficent operations of missions more clearly. Caste is a Portuguese term, used to denote distinctions in Hindoo society, which they designate by the terms varna,[2] gati, or jathi, and other words. In Colchis and Iberia the people were divided into four classes, whose rank and office were unchangeable. Jemshid made the same division of the people in Persia; but these distinctions made by law could be also unmade by the same power. In India the division of the people into castes is regarded as the work of the Creator, and, therefore, unalterable. An orthodox Hindoo no more regards different castes as belonging to the same race than he regards cows and horses as the same species. It seems to have been an institution ordained by the Brahmans for their own aggrandizement; only they did not venture so far in the Vedas (1300 B. C.) as they did afterwards in the Institutes of Menu (900 B. C.) These teach that Brahma produced the Brahmans from his mouth, the Kshatryas[3] from his arms or shoulders, the Vaishnas[4] from his thighs, and the Soodras[5] from his feet.

Brahmans were to be honored more than kings. The most exalted Indian sovereign, if not a Brahman, could not eat with them. "Whatever crime a Brahman might commit, his person and property were not to be injured; but

[1] D. O. Allen's *India*, pp. 416–419. [2] Color. [3] Soldiers. [4] Merchants and farmers. [5] Lowest caste.

whoever struck one of them, even with a blade of grass, would become an inferior quadruped for twenty-one transmigrations." The Kshatryas and Vaishnas are now regarded as extinct, and instead of them have risen almost as many different castes as there are occupations. The divisions of caste vary in different parts of India; generally men of the same trade belong to the same caste. A volume on caste, published in Bombay in 1827, described one hundred and twenty-five castes in that Presidency.

There is much difference in the personal appearance of different castes, though often the dress is requisite to form a correct opinion of the caste of an individual. The higher castes are generally lighter in complexion, but some Brahmans are very dark, and some Mangs light. The Soodras were regarded as so inferior that whoever among them committed to memory any part of the sacred books was to be put to death. If he read them to one of a higher caste, boiling oil was to be poured into his mouth, or into his ears if he even listened to them, and their punishments for ordinary crimes were more severe than those appointed to others. The Brahman may seize the goods of a Soodra, and whatever he acquires by labor or inheritance beyond a certain amount. As a high caste is not obtained by virtue, so, in practice at least, it is not lost by vice. The Brahman murderer or adulterer is no whit less a Brahman, nor abates one jot of his demand for reverence.

It is needless to add that the practical operation of caste does not promote human well-being. When a bricklayer had fallen from a great height and was seriously injured, his fellow-workmen refused to bring him water because they were not of the same caste; and a sepoy of high caste blew out his brains because he had lost caste through some water thrown on him by a servant in the hospital, to recover him from a fainting fit. When a fire in Madras threatened a general conflagration, the Brahmans forbade the use of the neighboring wells, lest the approach of some one of lower caste should pollute them; and Christians have been forbidden to use water from the public tank for the same reason.

The loss of caste involves, according to Hindoo law, the loss of all social and civil rights. Family ties are sundered; property goes to one's heirs; the person is treated as already dead, and even special funeral rites are performed; nor could one obtain redress from friends or government, so long as the proceedings were in accordance with the rules of caste. Naraput Singh lived in Bengal like a nabob; but the moment he was baptized, his relatives seized on his property of $40,000, and he supported his family by labor, for which he received five dollars per month. And this is only one case out of many in connection with every mission in India.

A writer in the *Encyclopædia Britannica*[1] says: "Protestant missionaries are unable to offer in the British society of India a sympathizing and protecting caste in place of that which it costs the convert so much to leave." It may not be uncharitable to infer that the writer would not afford them much sympathy, for we infer that the man who could state that "at the present day the progress of Protestant missions amounts almost to nothing," and in the next

[1] *Sub voce*, caste.

BRAHMAN FAMILY

sentence state on the authority of Dr. Mullens, that missionary labor "had produced a native Christian community of *only* two hundred and eighty thousand six hundred," has not much sympathy for either Protestant missionaries or their converts. That word "only" in such a connection shows the animus of the writer, and we are not surprised at his *quasi* endorsement of the Abbé Dubois, who considered the institution of caste the happiest effort of Hindoo legislation, and that India was indebted to it for her deliverance from the barbarism that once filled almost the whole of Europe.

When caste is lost it can be recovered only at a great cost. A Brahman who had flesh and brandy forced into his mouth, after three years spent $40,000 in a vain attempt to be restored, and it was only an expenditure of $100,000 that at last secured success. Even then, sundry ceremonial ablutions and disgusting penances, such as drinking a mixture of the five products of the cow, were necessary to restoration. Others, whom Tippoo Sahib forced to eat beef, in his efforts to compel them to become Mohammedans, after his overthrow found that nothing could atone for the horrible guilt of eating the flesh of the sacred cow.

Such things show how deep-rooted was the institution of caste in India. So inexorable were its demands that Gregory XV sanctioned the practice of its rules in the papal churches of India. Even the celebrated missionary, C. F. Schwartz, tolerated it in the churches he established, and Bishop Heber did the same; but it is thoroughly discountenanced by all the missions under the care of the American Board. Both in India and Ceylon they always required a renunciation of caste just as much as of idolatry, in order to baptism. No changes were ever made in the seats or in the administration of the Lord's Supper. All sat on the same mats and drank from the same cup. Caste has not been recognized in any way; and when this was found not sufficient — for native Christians would do all this, and still, in social life prefer to go without food rather than eat it when cooked by a person of inferior caste — then they instituted social feasts, corresponding to the ancient Agapæ, so as thoroughly to destroy all caste distinction. At first they found difficulty; but soon those who had left, returned, heartily willing to renounce their prejudices and recognize the common humanity of all.

The rules of the Arcot mission say:[1] "Whereas caste is an essential part of heathenism, and its existence in the church saps the foundation of Christian unity; and whereas drinking from the same sacramental cup does not afford sufficient evidence of its renunciation; and whereas our Agapæ, though breaking down some of its barriers, do not always furnish sufficient proof of its abandonment; therefore,

"Resolved (1), That we adopt as a fundamental law of this mission, that the entire renunciation of caste be as indispensable to church membership as the abandonment of idolatry.

"(2) That unrestricted social intercourse among Christians, evinced by friendly visits, and by eating and drinking in each other's houses, is the only satisfactory proof of its relinquishment; and that any one who does not

[1] Abridged.

cheerfully conform to this cannot become or continue a member of any of our churches."

Such strenuous opposition to it in the churches shows the vitality of the evil encountered, as well as the uncompromising spirit in which it is met; and with this leaven leavening the churches of India, we are not surprised to find their enlargement proportioned to their faithfulness.

Other missions of the Board in India took similar ground. It is not necessary to transcribe them all. Let this stand as an expression of the spirit of them all.

Other influences go to undermine the structure of caste in society. Not the least of them is the acknowledged excellence of Christian character in native converts, and the influence of a more pronounced favor shown to Christian institutions by the government of India. The railroads now in operation there, the close contact they involve between different castes, and the general advance of intelligence, all coöperate to the same end.

It gives a hint of the difficulty of the work, however, that not till 1836 did the same Sir William Bentinck, who dealt the death-blow to suttee in 1829, venture to enact — not the abolition of caste — but "that the laws of Hindoos, Moslems, or other religions, shall not deprive any one of property to which but for the operation of such laws they would be entitled." The name of caste was not even mentioned, though it was at that the blow was aimed. In 1850 the Marquis of Dalhousie enacted that any law affecting the right of inheritance through excommunication, or being deprived of caste, shall cease to be enforced in the courts of the East India Company. This stirred up great commotion; and a memorial was even sent against it to the Houses of Parliament in England; but though introduced by Lord Monteagle in the House of Lords, and advocated by Lord Ellenborough, it failed of success, and caste, in the good providence of God, bids fair to be removed from among the hindrances to the regeneration of India; while not the smallest of the influences at work for its removal, is the oneness of all who are in Christ, and the brotherhood of man as set forth in that unity of Christians, and in the preaching of that divine redemption made alike for all.[1]

POLYGAMY.

Polygamy is both an effect and a cause of the degradation of woman. It is an effect, because no one could even think of such a thing till lust or laziness had destroyed true regard for woman. Either the mind must be blinded to her interest, or the heart hardened against it, before such a wrong could be inflicted. It is a cause, because it perpetuates the wrong, nor perpetuates it only, but ever digs deeper the pit of shame and suffering for its unhappy victims. We never find polygamy apart from wretchedness in the sex which ought to be the object of tenderest love. It is not only that another comes to steal away the love that of right was hers; that she is left to show kindness and wait in vain for a return of kindness; or that a rival supplants her in the possession of that which is dearest to woman; but love itself is degraded into lust, and the home

[1] D. O. Allen's *India*, p. 473.

which ought to be the sunniest spot on earth, becomes the center of all that is hateful and foul, provoking and exasperating. There are no places in this fallen world so full of cursing, bitterness, and all uncleanness, as polygamous homes. Those who have never seen them know nothing of the misery their walls enclose.

But the most important question is: How shall it be removed? Has a nation of polygamists ever voluntarily renounced polygamy? They may have found it a cup of bitterness; but did they ever throw it away of their own motion aside from the influence of the Gospel? Even the Jewish church did not do this, as Justin Martyr testifies to Jewish polygamy in his day.

It is difficult even for a Christian government to pass enactments against the polygamy of a conquered province; not only because of the amount of opposition to be encountered, but because of the amount of suffering involved to those already sustaining that relation. Neither in India nor South Africa has England ventured to break this yoke from off the neck of woman. In the former country a legal divorce from a polygamous marriage cannot be obtained; and in the latter we have seen how British law forbade the missionary to shelter the hunted victim of an infamous polygamy.[1]

If, then, there is no hope of the removal of this evil by the people, and government feels constrained to pursue such a course, whence shall deliverance come, if not through them who preach the Gospel to every creature? And if it comes in connection with them it is not from them, but only through them as channels of the grace of Christ. It is not personal opinions set up by them; but it is the truth as it is in Jesus, brought in contact with families, that lifts them out of the horrible pit, and puts a new song into their mouth. How then has it been in our missions in countries where polygamy exists?

The Arcot mission in India says, tersely: "Polygamy has not existed and will not be allowed to exist in any of our churches."

The Madura mission never received to the church any one living with more than one wife; and laid down the principle "that as polygamy is contrary to the original design of God in the marriage relation, and opposed to all the teachings of Christ; and as there is no evidence that apostles ever received polygamists into the churches, no polygamist should be received till he enters into solemn covenant that he will henceforth be the husband of only one wife." They add: "Although the government of the country recognizes polygamy as legal, and in some cases there may be difficulty in obtaining a legal divorce, yet no practical difficulty will arise from requiring a convert to live apart from all excepting one wife, while he supports those who may have been his wives, and their children. Even in an extreme case it would be better for one to be kept out of the church than that it should be tainted with this great evil."

The Marathi mission reports: The difficulty of this subject arises from the Hindoo law, which makes the marriage of the second wife while the first is living as legal as the original marriage. This law being recognized as valid by the English government, it is impossible for a polygamist in certain cases to obtain a legal divorce. When it can be obtained, it should always be required

[1] See p. 203.

before admission to the church; and even when it cannot, it is not expedient to admit any to the church without a written pledge that they will no longer cohabit with more than one wife, and will, if needful, support those put away so long as they lead virtuous lives. Then they will be free from the guilt of polygamy, and proper candidates for admission to the church.

No polygamist has been received by any other mission in India, nor is there any danger that they ever will be.[1]

Among the Zulus the evil prevails in its lowest and most revolting forms. Bishop Colenso having declared his purpose not to interfere with the married life of the Zulus, and having reflected on the practice of American and other missionaries to the contrary, a public discussion followed, not greatly to the advantage of the bishop, some of the clergy of his own church coming out against him. A number of pamphlets were published during the debate, and no one need be ashamed of the part taken in it by our missionaries.

These things show whence the emancipation of woman from such bondage really comes. Not from progress in polygamous communities, or from the acts of government, but from the living Christ in his living Word, ministered by those whom he sends to be the channels of his heavenly grace.

[1] See Dr. Anderson's *Memorial Volume*, p. 297; and conference of deputations with the missions.

APPENDIX I.

HOME LITERATURE OF THE AMERICAN BOARD.

CONTRIBUTIONS OF ITS MISSIONARIES TO THE "JOURNAL OF THE AMERICAN ORIENTAL SOCIETY."

Rev. D. O. Allen, Bombay. State and Prospects of the English Language in India. IV, 263–275.

Rev. O. P. Allen, Harpoot. Letter describing ancient ruins north of Diarbekir. IX, xv at end of volume.

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Rev. A. Bushnell, Gaboon River. V, 264; VIII, lxiv and lxxxii.

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H. A. De Forest, M.D., Mount Lebanon. A Tour in Mount Lebanon and East of Lake Hûleh. II, 237–247. Ruins in the Bukaa. III, 349–366. Phenician Inscription referred to. V, 229.

Rev. H. G. O. Dwight, D.D., Constantinople. Catalogue of Armenian works previous to the seventeenth century. III, 243–288. Orthography of Armenian and Turkish Proper Names. IV, 118–121. Translation of Firman given by the Sultan Abd ul Mejeed to the Protestants. 443. Armenian Traditions about Ararat. V, 190.

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Rev. Henry C. Hoisington, Ceylon. Syllabus of the Siva Gnana Potham, a sacred book of the Hindoos. II, 137–154. Law of the Tattavam. A synopsis of the mystical philosophy of the Hindoos. Translated from the Tamil. IV, 1–30. Siva Gnana Potham — Instruction in the knowledge of God. Translated from the Tamil, with introduction and notes. 31–102. Siva Pirakasam, Light of Sivan. Translation with notes. 127–244.

Mr. P. R. Hunt, of Madras. On Native Presses in India. II, 340.

Rev. J. Y. Leonard, Amasia. Greek Inscriptions from Ancient Pontus. IX, xlvii.

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Rev. D. W. Marsh, Mosul. On the Ruins of Nineveh. VII, xlvii.

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Life of Alexander the Great. Translated from the Syriac. IV, 359–440. Letter. VI, 574; and VIII, lii. Revelation of Paul. Translated from the Syriac. VIII, 183–212. Letter. IX, lvii.

A. T. Pratt, M.D., Marash. Armeno-Turkish Alphabet. VIII, 374–376. Locality of the legend of the Seven Sleepers. liii. Letter. IX, lxxvi.

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Rev. W. G. Schauffler, D.D., Constantinople. Shabbathai Zevi and his Followers. II, 1–26.

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S. Wells Williams, LL.D. On Japanese Syllables. II, 55–60. On Dealings between China and the Western Powers. VII, vii. Letter. IX, xxviii.

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Rev. S. H. Calhoun, D.D., Mount Lebanon. The Cedars. XIV, 200–202.

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Rev. W. W. Howland, Ceylon. Caste in Ceylon. XI, 470–489.

G. C. Hurter. Fountain in the Rock at Sinai. XXII, 154–156.

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Rev. Daniel Ladd, Smyrna. Exposition of Hebrews ix: 8. XIV, 46–61.

Rev. Thomas Laurie, Turkey. Visit to Sheikh Adi and Khorsabad. V, 148–171. Oriental Illustrations of Scripture. VI, 396–401. Assyrian Inscriptions and the Bible. XIV, 147–165. Translation of Meshakah on Skepticism, with notice of the author. XV, 693–726. Wine at the Lord's Supper. XXVI, 163–183. Mount Lebanon. 541–571, and 673–713. "Identification of Pisgah" reviewed. XXXIII, 132–153. Review of Dr. H. J. Van Lennep's "Bible Illustrations from Bible Lands." XXXVI, 534–560, and 647–665.

Rev. Henry Lobdell, M.D., Mosul. Letter on Jonah's Gourd, XII, 396–398. Notes on the Anabasis of Xenophon. XIV. 229–257.

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Rev. Daniel Poor, Ceylon. See W. W. Howland. XI, 470–489.

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Rev. George B. Whiting, Syria. Antiquities of Jerusalem. V, 94–97.

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A. P. Peabody. XXXII, 243-268. Review of all his histories, by Pres. S. C. Bartlett. XXXVI, 132-151.

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Rev. William Clark, Turkey. Armenian History. XXII, 507-529, and 672-691. Kûrdish Tribes of Western Asia. XXIII, 28-49.

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Rev. F. DeW. Ward, India. Review of "India and the Hindoos." IX, 154.

S. Wells Williams, LL.D., China. Review of "The Middle Kingdom." VII, 215-229. Primers and Juvenile Books among the Chinese. XXXVII, 297-310. Afghanistan and the English. XXXVIII, 95-113. Female Education and Authors in China, with translation of Girl's Primer. XXXVIII, 184-200. Our Treaties with China. XXXVIII, 301-324.

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Babajee, a converted Brahman. By Rev. H. Read. Two vols., 12mo, pp. 264 and 275. New York: Leavitt, Lord & Co. 1836.

Bartimeus, of the Sandwich Islands. By Rev. H. Bingham. 18mo, pp. 58. New York: American Tract Society.

Catharine Brown, of the Cherokee nation. By Rev. R. Anderson, D.D. 18mo, pp. 144. Boston: Crocker & Brewster. 1824. Third edition, 1828.

Pious Nestorians. By members of the Nestorian Mission. 12mo, pp. 284. Boston: Massachusetts Sabbath School Society. 1857.

Henry Obookiah, of the Sandwich Islands. 18mo, pp. 126. Philadelphia: American Sunday School Union. 1829.

Little Osage Captive. By Rev. E. Cornelius. 18mo, pp. 72. Boston: Massachusetts Sabbath School Society. Second edition. 1832.

Ram Krishna Punt, the Boy of Bengal. By Rev. E. Webb. Square 8vo, pp. 40. Presbyterian Publication Committee. 1866.

The Martyr of Lebanon. A memoir of Asaad Esh Shidiak. By Rev. Isaac Bird. 16mo, pp. 208. Boston: American Tract Society. 1864.

HISTORICAL WORKS.

Rev. David Oliver Allen, D.D. India, Ancient and Modern, Geographical, Historical, Political, Social, and Religious. 8vo, pp. 618. Boston: J. P. Jewett. 1856.

Rev. Rufus Anderson, D.D.:

1. Memorial volume of the first fifty years of the American Board of Commissioners for Foreign Missions. 8vo, pp. 462. Boston: Missionary House. 1861.

2. The Hawaiian Islands, their Progress and Condition under Missionary Labors. 12mo, pp. 450. Boston: Gould & Lincoln. 1864.

3. Foreign Missions, their Relations and Claims. 12mo and 8vo, pp. 373. Giving an

account of Apostolic missions, early Irish missions, Romish missions, and modern evangelical missions. New York: C. Scribner & Co. 1869.

4. History of the Missions of the A. B. C. F. M. to the Oriental Churches. Two vols., 12mo and 8vo, pp. 426 and 532. Boston: Congregational Publishing Society. 1872.

5. History of the Missions of the American Board of Commissioners for Foreign Missions to India. 12mo and 8vo, pp. 443. Boston: Congregational Publishing Society. 1874.

6. History of the Mission of the A. B. C. F. M. to the Sandwich Islands. 12mo and 8vo, pp. 408. Boston: Missionary House, 1870; and Congregational Publishing Society, 1874.

Rev. Hiram Bingham. The Civil, Religious, and Political History of the Sandwich Islands. 8vo, pp. 616. Hartford: Hezekiah Huntington. 1847.

Bible Work in Bible Lands. By Rev. Isaac Bird. pp. 432. Philadelphia. 1872.

Rev. Sheldon Dibble. History of the Mission to the Sandwich Islands. 12mo, pp. 268. New York: Taylor & Dodd. 1839.

Rev. Justus Doolittle. Social Life of the Chinese, with some account of their Religious, Governmental, Educational, and Business Customs and Opinions. Two vols., 12mo, pp. 459 and 490. New York: Harper & Brothers. 1865.

Rev. H. G. O. Dwight, D.D. Christianity Revived in the East. A narrative of the work of God among the Armenians of Turkey. 12mo, pp. 290. New York: Baker & Scribner. 1850. Same, republished in London, 1854, as Christianity in Turkey, or The Protestant Reformation of the Armenian Church.

Rev. J. R. Eckard. Ten Years in Ceylon. A personal narrative of residence there. pp. 254. Philadelphia: Perkins & Purves. 1844.

Rev. Lewis Grout. Zulu Land, or Life Among the Zulu Kafirs, South Africa. 12mo, pp. 351. Philadelphia: Presbyterian Publication Committee. 1864.

Rev. Cyrus Hamlin, D.D. Among the Turks. 12mo, pp. 378. New York: R. Carter & Brothers. 1878.

Mrs. K. C. Lloyd. Christian Work in Zulu Land, or the Seed and the Sheaves. 12mo, paper. New York: A. D. F. Randolph & Co. 1870. Second edition, enlarged, pp. 88 and 7.

The Life and Religion of Mohammed, as contained in the Sheeah Traditions of the Hyat ul Kuloob. Translated from the Persian, by Rev. James L. Merrick. pp. 483. Boston: Phillips, Sampson & Co. 1850.

Miss Melinda Rankin. Twenty Years among the Mexicans. 16mo, pp. 199. Cincinnati: Chase & Hall. 1875.

Rev. Hollis Read. India and its People, Ancient and Modern. 12mo, pp. 384. Columbus, Ohio: J. & H. Miller. 1859. He wrote, also, "The Hand of God in History." Two vols., 12mo. Hartford: Robbins & Co. 1849. Two editions were sold in London. In 1859 he published "The Palace of the Great King." New York: E. B. Treat. Also republished in London. In 1862 "The Coming Crisis of the World," by the same publisher. A prize essay on "Commerce and Christianity," appeared at Philadelphia. Still another volume, entitled "The Negro Question Solved." New York: E. B. Treat. And "The Devil in History, or the Footprints of Satan." 8vo. From the same press. 1875.

Rev. Stephen R. Riggs. Tahkoo Wahkan, or The Gospel among the Dakotas. 18mo, pp. 491. Boston: Congregational Sabbath School and Publishing Society. 1869.

Rev. Joseph Tracy, D.D. History of American Board of Commissioners for Foreign Missions up to 1841. 8vo, pp. 452. Worcester, Mass., 1840; and New York: M. W. Dodd. 1842.

Rev. C. H. Wheeler. Ten Years on the Euphrates, or Primitive Missionary Policy Illustrated. 16mo, pp. 330. Boston: American Tract Society. 1868. Letters from Eden. 16mo, pp. 432. Boston: American Tract Society. 1868. Grace Illustrated. 16mo, pp. 313. Boston: Congregational Publishing Society. 1876.

S. Wells Williams, LL.D. The Middle Kingdom. A Survey of the Geography, Government, Education, Social Life, Arts, Religion, etc., of the Chinese Empire. 12mo, two vols., pp. 590 and 614. New York: Wiley & Putnam. 1848.

Rev. John Leighton Wilson. Western Africa. Its History, Condition, and Prospects. 12mo, pp. 527. New York: Harper & Brothers. 1856.

Rev. Myron Winslow, D.D. A Sketch of Missions. 12mo, pp. 432. Andover: Flagg & Gould. 1819.

Hints on Missions to India. 16mo, pp. 236. New York: M. W. Dodd. 1856.

TRAVELS AND MISCELLANY.

Rev. D. Abeel. Journal of a Residence in China and Neighboring Countries. 12mo, pp. 398. New York: Leavitt, Lord & Co. 1834.

Missionary Convention at Jerusalem. New York. 1838.

Rev. R. Anderson, D.D., LL.D. Observations upon the Peloponnesus and Greek Islands. 12mo, pp. 334. Boston: Crocker & Brewster. 1830.

Henry Ballantine. Night Marches Through Persia. 12mo, pp. 267. Boston: Lee & Shepard. 1879.

S. G. W. Benjamin. The Turk and the Greek, or Creeds, Races, Society, and Scenery in Turkey and Greece. 16mo, pp. 268. New York: Hurd & Houghton. 1868.

Rev. H. Bingham, Jr. Story of the "Morning Star." 16mo, pp. 72. Boston. 1866.

Rev. E. C. Bissell, D.D. Austria. The Historic Origin of the Bible. 12mo, pp. 432. New York: A. D. F. Randolph & Co. 1873. The Apocrypha of the Old Testament, with Introduction, Translation, and Notes. Royal 8vo. New York: C. Scribner's Sons. 1880.

Rev. G. Bowen, Bombay. Religious Readings for Every Day in the Year. 12mo. Philadelphia: Presbyterian Board of Publication.

Rev. Josiah Brewer. Residence at Constantinople in 1827. 12mo, pp. 372. New Haven: Durrie & Peck. 1830.

Rev. E. C. Bridgman, D.D. Letters to Children. Boston. 1834. Letters on China. pp. 124. Boston. 1840.

Mrs. Eliza J. G. Bridgman. Daughters of China. Sketches of Domestic Life there. 18mo, pp. 234. New York: Carter & Brothers. 1853.

Rev. E. Burgess, D.D., India. What is Truth? Antiquity and Unity of the Race. 12mo, pp. 424. Boston: I. P. Warren. 1871.

Rev. Titus Coan. Adventures in Patagonia. 12mo, pp. 319. New York: Dodd, Mead & Co. 1880.

Rev. Sheldon Dibble, Sandwich Islands. Thoughts on Missions. New York: American Tract Society.

Rev. J. W. Dulles. Life in India, Madras, the Neilgherries, and Calcutta. 12mo, pp. 528. Philadelphia: American Sunday School Union. 1855.

Rev. Henry O. Dwight. Turkish Life in War Time. 12mo, pp. 428. Charles Scribner's Sons. 1881.

Rev. William Ellis. The American Mission in the Sandwich Islands. 8vo, pp. 108. London: Jackson, Walford & Hodder. 1866.

Jeremiah Evarts, Secretary of A. B. C. F. M. Essays on the Present Crisis in the Condition of the North American Indians. pp. 112. Boston: Perkins & Marvin. 1829.

Rev. S. B. Fairbanks. List of Birds of Western India. In Government Gazetteer, and in a separate volume.

Fidelia Fiske. Recollections of Mary Lyon. 12mo, pp. 333. Boston: American Tract Society. 1866. Memorial Volume of Mount Holyoke Seminary. 12mo, pp. 174. South Hadley. 1862.

Rev. W. Goodell, D.D., Turkey. The Old and New, or Changes of Thirty Years in the East. 12mo, pp. 240. New York: M. W. Dodd. 1853.

A. Grant, M.D. The Nestorians, or the Lost Tribes. 12mo, pp. 385. New York: Harper & Brothers, 1841; London: J. Murray, 1841.

Rev. H. H. Jessup, D.D. The Women of the Arabs. 12mo, pp. 369. New York: Dodd & Mead. 1873. Syrian Home Life. 12mo, pp. 366. New York: Dodd & Mead. 1874. The Mohammedan Missionary Problem. pp. 138. Philadelphia: Presbyterian Board of Publication. 1879.

Rev. J. King, D.D. The Oriental Churches and the Latin.

Rev. T. Laurie, D.D. Glimpses of Christ. 12mo, pp. 264. Boston: Gould & Lincoln, 1869; and Congregational Publishing Society.

Rev. S. B. Munger. The Conquest of India by the Church. pp. 388. Boston. 1845.

Rev. S. Parker. Exploring Tour Beyond the Rocky Mountains. 12mo, pp. 371. Ithaca, New York. 1838. Third edition. 408 pp. 1842.

P. Parker, M.D. Journal from Singapore to Japan and Lewchew. pp. 75. London. 1838. Hospitals in China. pp. 32. London and Glasgow. 1842. Reports of Ophthalmic Hospital in Canton, several years.

Rev. M. P. Parmelee. Life Scenes among the Mountains of Ararat. 18mo, pp. 265. Boston: Massachusetts Sabbath School Society. 1868.

Rev. J. Perkins, D.D. Residence of Eight Years in Persia. 8vo, pp. 512. Andover: Allen, Morrill & Wardwell. 1843. Missionary Life in Persia. 16mo, pp. 256. Boston: American Tract Society. 1861 and 1868.

Rev. W. Ramsay. Journal of a Missionary Tour in India. pp. 367. Philadelphia: J. Wetham. 1836.

Rev. E. Riggs, LL.D., Constantinople. Manual of the Chaldee Language. Revised edition, 8vo, pp. 152. New York: A. D. F. Randolph; and London: Sampson, Low & Co. 1858. Suggested Emendations of the Authorized English Version of Old Testament. 12mo, pp. 130. Andover: W. F. Draper. 1873.

Rev. W. G. Schauffler, D.D. Meditations on the Last Days of Christ. 12mo, pp. 380. Boston. 1837. Do. 12mo, pp. 439. Boston: J. P. Jewett. 1853.

Mrs. Eliza C. A. Schneider. Letters from Broosa, Asia Minor. 12mo, pp. 210. Chambersburg, Pennsylvania. 1846. Including appendix, 246 pages.

Rev. John Scudder, M.D., Ceylon. Letters from the East. Boston. 1833. Letters to Sunday School Children. Tales about the Heathen. The Redeemer's Last Command. pp. 112. New York: American Tract Society. 1846.

Pres. J. H. Seelye. The Way, the Truth, and the Life. Lectures to Educated Hindoos 12mo, pp. 146. Boston: Congregational Publishing Society. 1873.

Rev. E. Smith, D.D. Sermons and Addresses. 18mo. Boston. 1833. Biblical Researches in Palestine, Mount Sinai, and Arabia Petræa in 1838. By E. Robinson and E. Smith. Three vols., 8vo, pp. 571, 679 and 721, including appendix of 210 pages. Boston: Crocker & Brewster, 1841; New York: J. Leavitt; London: J. Murray; Halle: Waisenhausbuchhandlung, 1841. Biblical Researches in Palestine and the Adjacent Regions in 1852. By E. Robinson, E. Smith, and others. 8vo, pp. 664. Boston: Crocker & Brewster; London John Murray; Berlin: G. Reimer. 1856. Researches of Rev. E. Smith and Rev. H. G. O. Dwight in Armenia, etc. Two vols., 12mo, pp. 328, 348. Boston: Crocker & Brewster. 1833. Republished in London.

Rev. C. S. Stewart. Journal of a Residence at the Sandwich Islands, 1823–1825. 12mo, pp. 407. London: Fisher & Jackson, 1828; and Boston: Weeks, Jordan & Co., 1839. pp. 348. Visit to the South Seas in the United States ship "Vincennes." Two vols., 12mo, pp. 357 and 360. New York: J. P. Haven. 1831.

Rev. W. M. Thomson, D.D. The Land and the Book, or Biblical Illustrations drawn from the Manners, Customs, and Scenery of the Holy Land. Two vols., 12mo, pp. 557 and 614. New York: Harper & Brothers; Edinburgh and London: T. Nelson. 1859. Also first volume of the same re-written, entitled "Southern Palestine and Jerusalem." Large 8vo, pp. 592. By same publishers in New York, London, and Edinburgh. 1880. Two more volumes are to follow.

Rev. C. C. Tracy, Turkey. Myra. 18mo, pp. 89. Boston: Congregational Publishing Society. 1877.

Rev. T. C. Trowbridge. Occasional Papers on Turkey. 8vo, pp. 75. New York: A. D. F. Randolph & Co. 1874.

Rev. H. J. Van Lennep. Travels in Asia Minor. Two vols., 12mo, pp. 343 and 325. New York: A. O. Van Lennep. 1870. Also in London. Bible Lands, their Modern Customs and Manners, illustrative of Scripture. 8vo, pp. 832. New York: Harper & Brothers. 1875.

Rev. W. Warren, Agent of A. B. C. F. M. These for Those; Our Indebtedness to Foreign Missions. 16mo, pp. 410. Portland, Maine: Hoyt, Fogg & Breed. 1870. Twelve Years with the Children. 16mo, pp. 325. Portland: Hoyt & Fogg. 1869.

Rev. E. Webb, India. Hindoo Life. Square 8vo, pp. 64. Philadelphia: Presbyterian Publication Committee; and New York: A. D. F. Randolph & Co. 1866.

Maria J. West. The Romance of Missions, or Inside Views of Life and Labor in the Land of Ararat. 12mo, pp. 710. New York: A. D. F. Randolph & Co. 1875.

Rev. C. H. Wheeler. Little Children in Eden. 18mo, pp. 157. Portland: Hoyt, Fogg & Dunham.

Mrs. S. A. Wheeler. Daughters of Armenia. 16mo, pp. 157. New York: American Tract Society. 1877.

S. Wells Williams, LL.D. A Chinese Commercial Guide. Hong Kong. 1863. Five editions. Anglo-Chinese Calendar. Eight vols., from 1847–1855.

Rev. M. Winslow, D.D. Hints on Missions to India. 18mo, pp. 236. New York: M. W. Dodd. 1856.

APPENDIX II.

LIST OF THE PUBLICATIONS OF THE SEVERAL MISSIONS OF THE A. B. C. F. M. IN THE LANGUAGES OF THE COUNTRIES WHERE THEY ARE SITUATED.

GREAT pains have been taken to make this list complete, but the catalogue of some of the missions is still far from perfection. It has been found impossible to reduce all to a uniform style, without sacrificing some valuable items that could not be obtained concerning all alike. The list was held open for improvement to the last moment, and every available source of information has been diligently improved. It is hoped that those missionaries who find the work of their missions inadequately set forth, will furnish the material for doing them more ample justice, for it is only their failure to communicate the facts that has necessitated the imperfection of the report.

MPONGWE AND COGNATE LANGUAGES.

Scriptures.

	Language.	Size.	Date.	Place.
Gospel of Matthew	Grebo	12mo	1838	Cape Palmas
" " "	Mpongwe	"	1850	Gaboon River
" " John . . . Grebo, also	"	"	1852	New York
" " Mark . . . " "	Dikĕlĕ	"	1855	Gaboon River
Genesis, part of Exodus, Proverbs and Acts	Mpongwe	"	1859	New York
Gospels of John and Mark	"	16mo	1864	
" " Luke		"	No date	
Epistles of St. Paul	"	12mo	1867	New York
Epistles of James, Peter, John, Jude, and Apocalypse	"	"	1869	" "

Other Works.

Peep of Day	Mpongwe	12mo	1852	Gaboon River
Grammatical Analysis of the Grebo Language, by J. L. Wilson			1838	Cape Palmas
Dictionary of the same, in two parts, by J. L. Wilson			1839	" "
Grebo Reader. Part I. With Notes and Dictionary for Beginners. By J. L. Wilson			1841	" "
Grammar, with Vocabularies. Mpongwe. 8vo			1847	New York
Grammar. Bakĕlĕ. 8vo			1854	" "
Colloquial sentences. Also extracts from the New Testament.				
Grammatical Tables.				

ZULU.

	Size.	Date.	Place.
Book of Psalms	12mo	1850	Natal
Gospels of Matthew and Mark.			
Epistle to the Romans	8vo	1854	"
Acts of the Apostles	8vo	1859	"
Gospel of John	12mo	1860	D'urban
Genesis	12mo	1863	New York
New Testament	12mo	1865	Natal

Bible now ready and probably published in 1881.

Religious Books.

	Size.	Date.	Place.	Translator.
Daily Food	16mo		New York	
Hymn Book	16mo	1864	Natal	
Ecclesiastical History				S. B. Stone
Tract Primer	16mo	1861	New York	Mrs. A. Grout
Catechism.				
Bible Question-Book.				

Secular Books.

Dictionary	Royal 8vo, 460 pp.	1857	Cape Town	Rev. J. L. Döhne
Grammar	Royal 8vo, 400 pp.	1859	London	Rev. L. Grout
The Morning Star (monthly)	4to (commenced)	1861	Natal	
Geography	12mo	1862		Rev. L. Grout
The Torchlight (periodical)				
Arithmetic				J. C. Bryant
Outlines of History				"
Spelling-Books	16mo Several editions			Mrs. A. Grout

ARABIC.

The catalogue of Arabic issues of the Mission Press at Beirût, for January, 1879, is a neat pamphlet of twenty-eight pages. It is divided into eleven chapters.

Chapter I is devoted to *Editions of the Bible and Parts of the Bible*, and contains: An 8vo voweled Bible; a reference 8vo (Beirût: 1865); plain 8vo (New York: 1867. pp. 1633); a 12mo and a 16mo Bible; New Testament and Psalms, voweled (New York: 1867. pp. 507); the same in smaller type; the New Testament in six different editions, one voweled (Beirût: 1862), and two with references, also 8vo (Beirût: 1864), 12mo (Beirût: 1860. pp. 624); the Gospels and Acts, 16mo, voweled, each Gospel separately voweled, two sizes, third font and small cap.; Gospel of John, English and Arabic, also French and Arabic, also Turkish and Arabic, in parallel columns; Psalms, voweled and plain; Proverbs, voweled.

Chapter II contains *Educational and Scientific Works*, such as: A Primer; An Illustrated Primer; Reading-Book; Advanced Reading-Book; Analysis of English Sentences; Ajrumieh (Primary Arabic Grammar); Arabic Conjugations; Yazijy's Grammar; Ibn Akil's Grammar; Commentary on Examples in Ibn Akil; Yazijy's Rhetoric (1855. 12mo); also his Logic; Dr. Van Dyck's Prosody (1857. 8vo); Mrs. Hallock's Primary Geography; Berbari's Geography; Dr. Van Dyck's large Geography (1852. 12mo); set of colored wall maps; Miss Everett's Mental Arithmetic; Berbari's Arithmetic; Bistany's large Arithmetic (1848. 12mo); Dr. Van Dyck's Algebra (1853. 8vo); Dr. Van Dyck's Euclid (1857. 8vo); also his Trigonometry, Logarithms, and Physical Diagnosis; Dr. Post's Botany; also Physiology and Surgery; Dr. Van Dyck's Chemistry; Dr. Lewis's Chemical Analysis; Dr. Wortabet's Anatomy; also his Physiology, and Atlas of Physiology; Dr. Bliss's Mental Philosophy; Razi on Small Pox and Measles, edited by Dr. Van Dyck; Shidoody's Natural Philosophy; two works on Music, one of them by Dr. Lewis; Dr. Post's Natural History; Sarkis' English and Arabic Vocabulary (1863. 12mo); Porter's Latin Grammar in Arabic; also his Latin Reader and Vocabulary; Nopel's French and Arabic Vocabulary; Miss Everett's Primary Astronomy; Dr. Van Dyck's Higher Astronomy; Loomis's Meteorology.

Chapter III, of *Works on Poetry*, contains: Naseef el Yazejy's Poems; El Hariri; Poetry of El Farid; Sarkis' Ancient Arabic Proverbs.

Chapter IV is of *History*, and contains: Mosheim's Church History; Abearius' History; Josephus (abridged and translated); Sarkis' Ancient History; also his Life of Alexander the Great; History of Jerusalem; Tract on Bees; History of Mount Lebanon (1859. 8vo).

Chapter V contains *Religious Works*: Dr. Dennis' Evidences of Christianity; Dr. Post's Arabic Concordance; Sarkis' Key to Technical Words in Arabic Bible; Dr. E. Smith on the Holy Spirit (1863. 12mo); S. H. Calhoun's Scripture Help (1869. 8vo); also his Harmony of the Gos-

pels and Life of Christ; Wortabet's Commentary on Hebrews; Edwards' History of Redemption; Bogatsky's Golden Treasury; Daily Prayers; Consolation for Mourners; Year with St. Paul; Daily Food; Watts' Catechism; Brown's Catechism; Westminster Shorter Catechism; same with proofs (1845. 12mo); three Child's Question-Books; Four Tracts; Dr. Newton's Best Things, illustrated; and his Rays of the Sun of Righteousness; Training of Children; Duties of Children; Instructive Anecdotes; Schneider's History of Ceremonies; Whiting on Intemperance; Thomson's Sacramental Catechism; Hassoon's Chronology of the Gospels, and metrical version of Job; Solomon's Song, and Ecclesiastes; Hymn and Tune Book; Hymns alone; Psalms and Hymns, two sizes; Versified Psalms; Children's Hymns; Three Tracts; Ferhat on Preaching; The Second Coming of Christ; Prayer and Fasting; The Sinner's Friend; Dairyman's Daughter; Chrysostom on Reading the Bible.

Chapter VI, *Works Published at the Expense of the American Tract Society:* Line upon Line (1866. 12mo); Peep of Day (1862. 12mo); Precept upon Precept; Pilgrim's Progress, Parts I and II. Thomas à Kempis (1842. 12mo); History of Reformation. Two vols.

Chapter VII, *Works Published at the Expense of the London Religious Tract Society:* Annotated Paragraph New Testament; Keith on Prophecy; Glories of the Cross; Early and Late; Henry and his Bearer; Gambling; Ten Tracts; Faithful Promiser; Come to Jesus; Four packages of Bible Stories; Six Tracts; The Inquisition; The Holy War (Bunyan); Stories from Church History; Two Tracts; Alexander's Evidences (1851. 12mo); Sunday School Question-Book; Burder's Village Sermons; Philosophy of the Plan of Salvation; James' Anxious Enquirer; packages of colored Bible pictures; colored reward cards; Blanche Gamond; The Young Cottager; The Negro Servant; The Deity of Christ; Christ in the Old Testament.

Chapter VIII, *Sermons on Essentials of Religion:* On Faith and Works, on Glorying in the Cross (McLaurin); Image Worship; Sinners in the Hands of an Angry God (Edwards); Little Foxes (Van Dyck); Justification; Knowledge Puffeth Up (Dr. Post); The Knowledge of Christ (Dr. Dennis); The Truth of the Bible; On Prayer; "Grow in the Knowledge of Jesus Christ;" "The Opening of Thy Word giveth Light;" The Spiritual Family.

Chapter IX, *Controversy:* Scripture Proofs of Doctrines; Nevins on Popery (1844. 12mo), edited by Rev. G. B. Whiting; Haurani's Reply; Mishakah on Popery, and his Reply to Papists (1864. 12mo); Rev. Isaac Bird's Thirteen Letters (1849. 12mo); Mishakah on Reason in Religion; Nofel Effendi's Reply; On Transubstantiation; The Appeal of the Bible Christians to the Intelligent (1852. 12mo), by Michael Mishakah.

Chapter X, *Miscellany:* Morning Star Journal; Cedars of Lebanon, illustrated, by Dr. H. H. Jessup (folio); Lilies of the Field, by Dr. H. H. Jessup; Nusairean Religion, by a Nusairy (1863. 12mo); Robinson Crusoe; Law of Nations, by Nofel Effendi; bound volumes of the weekly "Neshra" (publication); Aun's Arts and Sciences; Sheikh Yusef el Aseer on "Inheritance;" Origin of Learning, by Nofel Effendi; also his Progress of Learning, and History of Religions; On Cookery; Asaad esh Shidiak; Biblical Interpretation, by Dr. Dennis; Chemistry of the Water and the Air; Elements of Geology.

The last division contained a few books then in press, which are here sorted out under their appropriate headings. Other Arabic works have issued from our presses in Malta and Beirût, but these are the most important. The list is one of which no mission need be ashamed, and no people can peruse such a literature without profit.

MODERN GREEK.*

Printed at Malta.

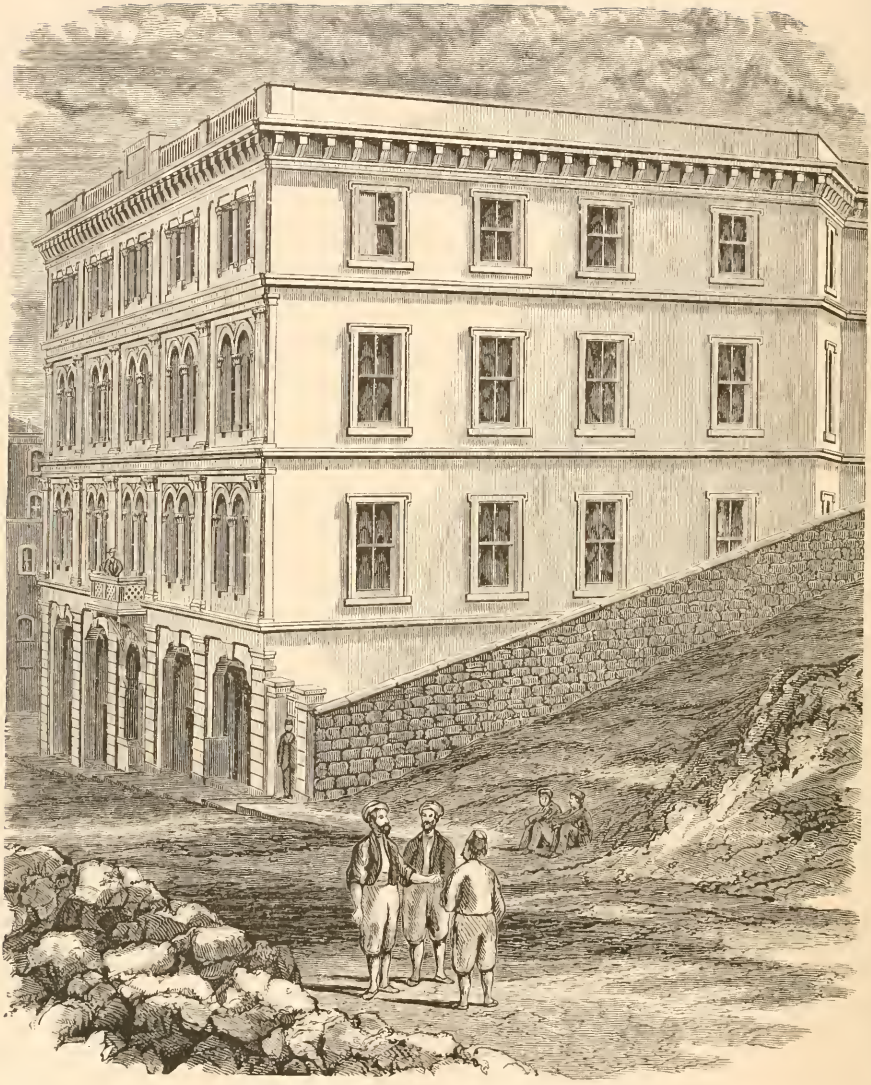
	Pages.
Dairyman's Daughter	30
Negro Servant	32
To Seamen (Payson)	20
On Redemption	54
Sixteen Sermons	48
Progress of Sin	16
A Dialogue. 16. On Eternity. 14	30
John the Baptist	28
The Young Cottager †	88
The Shepherd of Salisbury Plain	76
William Kelly	34
On Regeneration	24
Life of Abraham.† Second edition. 36 and 40. By B. Schneider	76
Three Tracts. 8, 4 and 4	16
Vivian's Dialogues	48
Two Old Men. 36. Woman of Valais. 24.	60
The Woodcutter	24
The Danger of Neglecting Christ	36
Three Letters of J. Newton	40
Three Tracts. 16 each	48
The Force of Truth. By T. Scott	164
Prayers for the Week	70
Three Tracts. 12, 12 and 16	40
Selections from Chrysostom	26
To Seamen	20
On Contentment	24
The Danger of Delay	26
An Exposition of the Lord's Prayer	12
The Poor Watchmaker	48
Two Tracts. 20 and 28	48
King Edward VI	20
The History of a Bible	28
The Love of Money	36
A Mother's Catechism	56
The Liberated Negro	76
The Life of God in the Soul of Man	168
Henry and his Bearer †	76
The Touchstone. Flavel	112
Baxter's Saint's Rest. 1824. 12mo	113
Three Tracts. 26, 36 and 42	104
The Life of Joseph.† Two editions. 60 and 94. By B. Schneider	154
Porteus's Evidences †	112
Andrew Dunn	146
The Epistles to the Seven Churches †	48
On Idolatry	12
The Authenticity of the Bible †	96
On Inspiration of the Bible †	36
Watts' Catechism †	24
Two Tracts. 28 and 34	62
The Pilgrim's Progress	350
The Life of Moses.† By B. Schneider	36
" " " Samuel.† " "	24
" " " Esther.† " "	20
" " " Daniel.† " "	36
Selections from Old Testament	84
The Life of David.† By B. Schneider	56
" " " Elijah.† " "	
" " " Elisha.† " "	40
The Scripture Compend. (Niketoplos)	48
" " Help.† Bickersteth. Abridged	48
Outline of Old Testament †	144
" " New " †	48
" " Acts of Apostles †	52
The Conversion of Paul.† Lyttleton. Two editions. 84 and 124	208
The Life of the Virgin Mary	20
The Priest and Catechumen	12
The Decalogue †	20
The Child's Book on the Soul. Translated by B. Schneider.	
The Philanthropist. 12mo.	
A Spelling-Book	72
British System of Educa'n. 1827. 12mo	188
Alphabetarion †	132
The Child's Assistant †	60
Adams' Arithmetic †	248
Pinnock's Catechism of Greek History	136
A Greek Reader †	156
The Little Philosopher †	72
Worcester's History of Greece †	60
" " of Rome†	92
" " of France †	60
" " of England †	84
Peter Parley's Geography †	112
A History of the Sandwich Islands †	84
A Dialogue on Grammar	72
The Child's Arithmetic	48
An Ecclesiastical History	26
Lessons for Children. Niketoplos	24
The Lottery	36
A Spelling-Book	270
A Greek Grammar †	108

Printed at Smyrna.

The Way to be Saved	12
The Nature of Faith	28
The Scriptural Teacher	116
An Answer to a Greek writer	32
Questions on Pentateuch	88
Woodbridge's Geography	296
The Repository of Useful Knowledge. A periodical.	

* *Missionary Herald*, 1838, p. 38.

† Reprinted at Smyrna.



BIBLE HOUSE, CONSTANTINOPLE.

ITALIAN, PRINTED AT MALTA.*

	Pages.
Prayers for the Week	56
The Dairyman's Daughter	32
Three tracts. 4, 8 and 12	24
W. Kelly. 32. Bishop Cranmer. 32	64
John the Baptist. 12. Peter. 44	56
Joseph. 64. Virgin Mary. 12	76
Four tracts. 8 each	32
" " 12 "	48
Three " 16 "	48
The Force of Truth. Scott	116
The Novelty of Popery	32
Andrew Dunn	80
The Bible Above all Price	24
A Short Method with Deists	24
The Young Cottager	72
The Negro Servant	32
The Shepherd of Salisbury Plain	28
A Sailor's Dialogue	18
Israel. 20. On Regeneration. 20	40
The Poor Watchmaker	24
A Catechism for Jews	60
The Two Old Men	24
The End of Time	20
The Life of God in the Soul of Man	78
Henry and his Bearer	52
The Proofs that Christ is Come	48
A Mother's Catechism	42
Bishop Porteus' Evidences	96
The Recaptured Negro	48
On the Inspiration of the Bible	24
" " Authenticity of the Bible	60
The Sabbath for Man	28
On the Worship of Images	28

ARMENO-TURKISH, PRINTED AT MALTA.

	Pages.
The Child's Best Portion	20
Henry and his Bearer	68
The Lord's Prayer	24
Dinah Dowdney	44
Christ the Way	24
The Young Cottager.	
New Testament	552
The Way to be Saved.	
Village in the Mountains.	
Scripture Help.	
Several tracts.	

The following list of Scriptures are for sale at the Bible House in Constantinople, of which a view is given on the opposite page. Most of them were either translated or edited by missionaries of the A. B. C. F. M.:

SCRIPTURES. ARMENIAN.

	Pages.
Bible. Royal 8vo. With references. E. Riggs and others. Smyrna: 1853	1169
Bible. 8vo. With references	1153
" 12mo	1324
New Testament. 12mo. With references. E. Riggs and others. Smyrna: 1849	891
New Testament. 8vo. With references	274
New Testament. 32mo. With references	842
New Testament (ancient). 32mo	706
" " " 12mo	708
" " With Psalms. 32mo. With references	1039
New Testament. 12mo	314
" " 8vo	678
New Testament. With Psalms. 8vo	870
Matthew. 12mo	44
Mark. 12mo	25
Luke. "	42
John. "	32
Psalms. 8vo. New York: 1865	192
" 16mo	281
" Pocket. 24mo. Smyrna: 1854	197
Psalms and Proverbs	277
" (ancient). 16mo. New York: 1865	255
Psalms (ancient). 12mo	265
Proverbs. 32mo. Smyrna: 1852	80
Gospels and Acts. Ararat dialect	443
New Testament. Ancient and modern dialect	861

* *Missionary Herald*, 1838, p. 40.

SCRIPTURES. ARMENO-TURKISH.

	Pages.
Bible. Royal 8vo. With references.	
" 12mo.	
Old Testament. 12mo. W. Goodell	1200
" " 16mo. " "	
Smyrna: 1841, 1842. Two vols. 1296 and 927.	
New Testament. Royal 8vo. With references. Revised by E. Riggs. Constantinople: 1856.	
New Testament. 12mo	870
New Testament. 16mo. W. Goodell. Smyrna: 1843	764
New Testament. 32mo	778
Psalms. 16mo. Smyrna: 1840	284
Proverbs	90
Matthew	122
Mark	66
Luke	108
John	83

SCRIPTURES. TURKISH. (Arabic Character.)

	Pages.
Bible. 8vo	1302
New Testament. 12mo	637
" " 32mo	621
Gospels and Acts. 12mo	345
Matthew. 12mo	82
Sermon on the Mount. For the blind.	
Matthew. Two vols. " " "	
Mark	52
Luke	86
John	66
Acts	84
Matthew. Turkish and English	152
" " " Italian	152
" " " French	152
Psalms. 16mo	274
" 32mo	187
Proverbs. 32mo	68
Psalms and Proverbs. 32mo	255
Isaiah	107
Pentateuch. 12mo. Smyrna: 1847.	
New Testament. Kûrdish	624
Gospels. "	398

SCRIPTURES. GRECO-TURKISH.

	Pages.
Bible. Royal 8vo. With references	1229
New Test. " " " "	303
New Testament. 24mo	791
Psalms	299

SCRIPTURES. GREEK.

	Pages.
Bible. 8vo. With references	1253
" " " "	1102
" "	1230
New Testament. 12mo. With references	555
New Testament. 12mo	479
" " 32mo	429
Gospels and Acts. 12mo	233
New Testament. 12mo. Greek and English. Parallel columns	652
New Testament. 12mo. Greek and French. Parallel columns	652
New Testament. 12mo. Greek and German. Parallel columns	652
Matthew	56
Mark	35
Luke	59
John	44
Acts	57
Three Books of Moses	283
Psalms. 32mo	216
" Athens edition	316
New Testament (ancient)	564

SCRIPTURES. BULGARIAN.

	Pages.
Bible. Royal 8vo. With references. E. Riggs. Constantinople: 1871	1054
New Test. 12mo. With references	647
" " "	514
" " 32mo	531
" " " With Psalms	707
" " 8vo	607
New Testament. Slavic. 8vo	607
New Test. With Slavic. In parallel columns. 8vo	1214
Genesis	188
" With Proverbs	291
Psalms. 12mo	201
" 24mo	222
" 32mo	176
Proverbs	103

SCRIPTURES. HEBREW-SPANISH.

Translated by W. G. Schauffler, D.D.	Pages.
Genesis. Hebrew and Turkish. 8vo	88
Old Testament. Hebrew, and Hebrew-Spanish. 8vo. Two vols. . .	2380
Pentateuch. Hebrew, and Hebrew-Spanish. 8vo	594
Psalms. Hebrew, and Hebrew-Spanish	168
Old Testament. Hebrew-Spanish . .	1190
New Testament.	664
Matthew. Hebrew-Spanish	81
Psalms. Hebrew-Spanish	215

	Pages.
Old Testament. Hebrew and German	1384
" " " " French	1022
" " " " English	1384

Other Books by W. G. Schauffler.

Hebrew Grammar. 8vo. 1854 . . .	183
" Lexicon. " 1855 . . .	448
Hebrew-Spanish Vocabulary.	
Natural Hist. and Geography of Bible.	
Translation of McCaul's Old Paths.	

PERIODICALS.

Avedaper. Armenian. 1855 and onwards.

" For children. Armenian. 1872 and onwards.

Avedaper. Armeno-Turkish. 1865 and onwards.

Avedaper. For children. Armeno-Turkish. 1872 and onwards.

Magazine of Knowledge. Armenian.

Zornitza. Bulgarian. 1866 and onwards.

Angeliophorus. Greco-Turkish. Monthly and weekly.

Manadero (Wellspring). Hebrew-Spanish. 4to. Monthly. 1855, etc.

A list of books published at our presses in Turkey had been, with much labor, written and rewritten, as emendations required; but a few days after it was completed, the following list came to hand, copied from the original records of the press, by Mrs. Isabella H. Bliss, of Constantinople, and as it is so much more full and reliable, it is very gladly substituted for the other. Most of the hymn-books and hymn and tune books were prepared by Dr. E. Riggs. Mrs. Mary L. Dwight prepared the Scripture text-book. Some of the Greek books have been struck out of Mrs. Bliss' list, that have been already noticed as printed at Malta, and others have been added which seem to have been printed at Athens.

THE PRINTING FROM 1839 TO 1853 WAS DONE AT SMYRNA, AND FROM 1853 TO 1881 AT CONSTANTINOPLE.

Many of the books and tracts included in the following list have been reprinted a number of times, some to the extent of four or five editions. In the list mention is made generally of only the first edition.

Armenian.	Size.	Pages.	Year.
Child's Book on Repentance	16mo	264	1839
Light of the Soul	"	42	"
Sermon on the Mount . .	12mo	16	1840
Claims of the Papacy . . .	16mo	77	"
Mother at Home	"	292	"
Dairyman's Daughter . . .	12mo	48	1841
Tract on Infidelity	"	16	"
What is it to Believe in Christ?	"	8	"

Armenian.	Size.	Pages.	Year.
Eternity	12mo	4	1841
Jones' Catechism	"	204	"
Life of Joseph	16mo	336	"
Mary Lothrop	"	96	"
Joy in Heaven over the Penitent	"	28	"
Worcester's Astronomy . .	"	104	"
Pilgrim's Progress	12mo	854	1842
Tract on Good Works . .	16mo	44	"

PRINTING DONE AT SMYRNA AND CONSTANTINOPLE. — Continued.

Armenian.	Size.	Pages.	Year.
What must I do?	16mo	24	1842
The World to Come	"	12	"
Guide to Salvation	"	20	"
Five Wounds of Conscience	"	12	1843
D'Aubigne's Reformation. Vol. I	8vo	992	1844
Balbaith's Confession	12mo	49	"
Spelling-Book	"	60	"
Progress of Sin	16mo	24	"
Sin no Trifle	"	16	"
Payson's Thoughts	24mo	180	"
Abercombie's Mental Culture	"	84	"
Three Conversations	"	98	"
The Two Lambs	"	52	"
Sermons. Monthly	8vo	284	1845
Friendly Letter to Sufferers by the Fire	"	16	"
Essay on Baptism	12mo	112	"
Assembly's Catechism, with reference	16mo	101	"
English Grammar	8vo	272	1846
Ans. of Evang. Armenians	12mo	104	"
Treatise on Lord's Supper	"	84	"
Protestant Confessions	16mo	265	"
Scripture Texts (tickets)	64mo	56	"
Rule of Faith	12mo	364	1847
Whately's Evidences	16mo	190	"
Concordance	8vo	604	1848
D'Aubigne's Reformation. Vol. II	"	608	"
Scripture Text-Book	12mo	622	"
Work of the Holy Spirit	"	173	1850
British Martyrology	"	222	"
Upham's Int. Philosophy	8vo	808	"
Hymns	16mo	55	"
Apology of the Evangelicals	8vo	46	1851
Village in the Mountains	12mo	36	"
Well-Spent Day	"	27	"
Spelling-Book	"	60	"
Doddridge's Rise and Progress	"	449	1852
Night of Toil	16mo	377	"
Tract Primer	12mo	108	"
Confession and Absolution	"	101	"
Children Invited to Christ	16mo	101	"
What has the Pope to do with the Armenian Church	12mo	44	1853
Life of Zwingle	"	74	"
Important Questions	"	28	"
Am I a Christian?	"	54	"
Flavel on Keeping the Heart	"	180	"
Lucilla	"	105	1854
Church Member's Guide	"	167	"
Cause and Cure of Infidelity	"	277	"
Protestantism Not a New Religion	"	44	"
Exposition of an Apostolical Church	"	48	"
Twenty-two Reasons for Attending Church	"	20	"
Psalm and Hymn Book	16mo	300	"
Theology	8vo	508	1855
Daily Meditations	16mo	160	"
Church Music	8vo	44	"
The Happy Escape	16mo	32	"
First Step	24mo	8	1856
Great Truths	12mo	111	1857
Reading-Book for Children	8vo	348	1858
Arithmetic	12mo	230	"
Saint's Rest	"	472	1859
Anxious Inquirer	16mo	318	"
Elements of Moral Science	12mo	244	"
Repentance Explained	"	76	1860
Reply to Archbishop Matteos	"	138	"
Self-Examination. Tract	"	44	"
Hymn and Tune Book for Children	8vo	40	"
Biblical Catechism	12mo	48	"
Brotherly Love. Tract	16mo	16	1861
Suggestions to S. S. Teachers	32mo	64	1862
Suggestions to S. S. Scholars	"	64	"
Canonical Books	12mo	46	"
Praying Mother	16mo	16	"
Why Not Talk of Christ, etc.	"	16	"
Evidences of Christianity (Hopkins)	"	462	1863
Hymns and Music	8vo	24	"
Armenian Grammar	12mo	243	1864
Commentary on Matthew and Mark	"	286	"
Tract on Future Punishment	"	18	"
Prayers for Private and Family Use	16mo	146	1865
Dictionary of Geographical Names	12mo	56	"
Hymn, "Come to Jesus"	8vo	4	"
Const'n of Harpoot Union	12mo	10	"
Letter to Pastors of Harpoot Union	"	16	1866
Letter to Church Members of Harpoot Union	"	12	"
Letter to Congregation of Harpoot Union	32mo	93	"

PRINTING DONE AT SMYRNA AND CONSTANTINOPLE. — Continued.

Armenian.	Size.	Pages.	Year.
Sunday School Hymn-Book	16mo	134	1867
Letter to the Churches . .	4to	4	"
Alphabetical Cards . . .	"	8	"
S. S. Hymn and Tune Book	8vo	128	1868
Dr. Clark's Letter to the Churches	4to	2	"
Week of Prayer Circular .	"	1	"
Intellectual Philosophy. Second edition	8vo	800	1869
Intellectual Philosophy. Third part (on the Will) .	"	312	"
Hymn-Book	16mo	426	"
Hymns and Prayers . . .	"	192	"
Pastor Simon's Letter . .	12mo	36	"
Rules for Holy Living . .	16mo	4	"
Pastor Marderos' Letter .	12mo	12	"
Tract, "Hints to Christians"	"	64	1870
" "Blind Margaret" .	"	12	1871
" "Pilgrim's Meditation," etc.	"	6	"
Tract, "Prepare to Meet Thy God"	"	6	"
Sermon by Pastor Marderos	"	24	"
Mountains of Bread . . .	"	8	1872
The Bridge (an allegory) .	12mo	8	"
Letters to Parents	"	252	"
Algebra	"	268	"
Tract, "Blot Out my Sins"	"	4	1873
" "Precious Invitation"	"	4	"
" "A Saviour for You"	"	44	"
Henry and his Friends . .	"	204	"
Armenian Hymn-Book . .	16mo	430	"
Physiology	12mo	220	1874
Geometry	"	237	"
Faith Explained	"	84	1875
Answer to Hohannes Vartabed	8vo	37	"
Tract, "Stranger's Meditations"	12mo	6	"
Geography	8vo	140	1876
Maps for Geography . . .	"	15	"
Com. on Acts of the Apostles	"	184	"
Com. on Epistle to Romans	"	128	"
S. S. Lessons for 1877 . .	12mo	108	"
How to Study the Bible. Moody's Sermon . . .	"	36	"
S. S. Question-Book for 1878	"	116	1877
Tract, "President Edwards' Resolutions"	12mo	8	"
Panoramic Hist. of David .	16mo	12	"
" " " Joseph	"	12	"
" " " Apostles	"	12	"

Armenian.	Size.	Pages.	Year.
Panoramic Hist. of Israelites in the Wilderness . . .	16mo	12	1877
Supplement to Hymn and Tune Book	8vo	56	"
Appendix to Hymn and Tune Book	"	16	"
S. S. Questions for 1879 .	12mo	152	1878
Book of Bible and other Pictures	8vo	100	"
Armenian Reader (No. 2) .	12mo	204	"
" " (No. 3) .	"	252	"
Hymns on cards	16mo	16	"
Mental Arithmetic . . .	12mo	144	1879
Divine Origin of Christianity	"	360	"
S. S. Question-Book for 1880	"	172	"
Uprising of the Armenians	8vo	78	"
Present Condition of the Armenians	"	168	"
Tract, "The Wasp's Sting"	"	8	"
" "I Can Steer my own Ship"	32mo	8	"
Tract, "Your Debt is Paid"	"	8	"
" "Who is Rich and Who is Poor?"	"	8	"
Scripture Texts for S. S. .	48mo	52	"
Picture cards. Words of Wisdom	"	14	"
S. S. Question-Book for 1881	12mo	176	1880
Bible Dictionary	8vo	620	"
Bible Hand-Book	12mo	418	"
S. S. Question-Book for 1881		180	"

Armeno-Turkish.			
Child's Book on the Soul .	16mo	168	1839
Self-Examination	"	48	1842
History of a Bible	"	34	"
Youth's Book of Natural Theology	12mo	233	1843
Good Works	16mo	48	"
Repentance	12mo	20	"
Reading the Scriptures . .	"	106	1844
Young Christian	"	350	"
Piety, from Pike's Persuasives	"	70	"
Serious Inquiry	"	20	"
Claims of the Pope . . .	16mo	112	"
Sermon on the Mount . .	24mo	28	"
Mary Lothrop	"	172	"
Memoir of Cappadose . .	12mo	52	1845
On Intemperance	"	46	"
Guide to the Use of the Fathers	16mo	318	"
On the Sabbath	"	116	"

PRINTING DONE AT SMYRNA AND CONSTANTINOPLE. — Continued.

Armeno-Turkish.	Size.	Pages.	Year.
Neff's Dialogue on Sin and Salvation	16mo	140	1845
Sermons (eight)	8vo	316	1846
Scripture Titles of Christ	16mo	104	"
Spelling-Book	8vo	64	1848
Barth's Church History	12mo	408	"
Jones' Catechism	"	305	"
Catechism on the Church	"	82	"
Narrative Tracts	16mo	152	"
Essay on Fasts and Feasts	12mo	220	1849
The World to Come	16mo	11	"
Without Holiness No Man Shall See the Lord	"	11	"
Commentary on Matthew	8vo	846	1851
Daily Meditations	16mo	499	"
Lives of the Patriarchs	8vo	428	1853
Arithmetic	"	68	"
Hymn-Book	16mo	112	"
Geography	12mo	135	1854
Confession and Covenant of Diarbekir Church	"	12	1855
Rites and Ceremonies	"	192	1856
First Step	16mo	8	1857
Aintab Church Confession of Faith	12mo	16	"
Monthly Extracts from Avedaper	Folio	204	"
Bible Text-Book	12mo	475	1858
Tract, "Way of Salvation"	12mo	9	1859
" "The Great Sacrifice"	"	6	"
" "The Lord's Supper"	"	14	"
" "Repentance"	16mo	13	"
" "Eternity"	"	11	"
First Book of Reading	12mo	62	1860
Tract, "Phebe, or the New Heart"	"	12	"
Tract, "Address to S. S. Teachers"	"	11	"
Theological Class-Book	"	268	1861
Papists and Protestants	"	408	"
Biblical Catechism	"	45	"
Great Salvation	16mo	16	"
Tract, "Dinah"	"	19	"
Light of the Soul	12mo	32	"
Golden Rule	16mo	13	"
Daily Food	32mo	128	1862
Anna Williamson	12mo	21	"
Last Days of Dr. Payson	"	21	"
Suggestions to S. S. Teachers	32mo	72	"
" " " Scholars	"	68	"
Canonical Books	12mo	48	1863
Tract, "Hell"	"	24	"
Pilgrim's Progress	"	596	1864

Armeno-Turkish.	Size.	Pages.	Year.
Baker's Catechism	12mo	343	1864
Goodell's Sermons	"	419	"
Tract, "Sermon for Family"	"	10	"
" "Serm'n for Children"	"	10	"
Scripture Texts. Cards		51	"
Call to United Prayer	"	1	"
Scripture Questions	"	104	1865
Life and Life's Object	16mo	40	"
Sermon on the Cross	12mo	16	"
Grammar of Mod. Armenian	"	213	1866
Supplement to Hymn-Book	16mo	88	"
Arithmetic	12mo	402	"
Avedaper Almanac	Folio	2	1867
Letter to Churches	"	2	1868
Week of Prayer Circular	"	1	"
Armeno-Turkish Grammar	12mo	213	"
Physiology	16mo	272	1869
Reader No. 1	12mo	60	1870
" No. 2	"	164	"
" No. 3	"	294	"
Key to Maps	"	36	"
Tract, "Lord's Prayer"	"	84	"
" "Atonement"	"	64	"
" "Prince and his Guest"	"	4	"
" "Something Better than Riches"	"	4	"
" "Bridge"	"	8	1872
Messianic Prophecies	"	208	"
Church History	"	840	"
Tract, "Blot Out My Sins"	"	4	1873
" "Precious Invitation"	"	4	"
" "A Saviour for You"	"	48	"
Commentary on Acts	8vo	200	1875
Letters to Families	12mo	325	"
Vocabulary of Turkish Words used in Revised Edition of Scriptures	16mo	46	1876
S. S. Lessons for 1877	12mo	117	"
How to Study the Bible. Moody's Sermon	"	16	"
First Book for Children	"	45	"
Little Joseph and his Ques.	16mo	8	"
Commentary on Romans	8vo	142	1877
Geography with Maps	"	171	"
S. S. Question-Book for 1878	12mo	125	"
Scripture Picture Cards	16mo	12	"
Panoramic Hist. of David	"	12	"
" " " Samuel	"	12	"
" " " Joseph	"	12	"
" " " Israelites in the Wilderness	"	12	"
Panoramic Bible Sea Scenes	"	12	"
" Times of the Apos.	"	12	"

PRINTING DONE AT ATHENS AND CONSTANTINOPLE.

Armeno-Turkish.	Size.	Pages.	Year.
S. S. Question-Book for 1879	12mo	156	1878
Book of Bible and other Pictures	8vo	100	"
Tract, "Tongues of Fire"	12mo	24	"
Book on Teaching	"	96	"
Mental Arithmetic	"	144	1879
S. S. Question-Book for 1880	"	184	"
Tract, "From Egypt to Canaan"	"	38	"
Tract, "Eternal Life"	"	36	"
" "Markarid, a Narrative"	"	11	"
Tract, "I Can Steer My Own Ship"	32mo	8	"
Tract, "Your Debt is Paid"	"	16	"
" "Who is Rich and Who Poor?"	"	16	"
Tract, "The Wasp's Sting"	"	8	"
" "Family Prayer"	"	7	"
Questions on Betts Maps	12mo	24	"
Picture Cards, "Words of Wisdom"	24mo	16	"
Picture Cards, "Words of Wisdom"	48mo	18	"
Story of Two Lambs	12mo	24	"
Worth of the Soul	"	20	"
What is Baptism	32mo	8	"
Sunday School Question-Book for 1881	12mo	194	1880
Notes on Gospels and Acts	"	251	"
S. S. Question-Book for 1881	"	192	"

Greek.	Size.	Pages.	Year.
History of Greece	12mo	120	1839
Tract on Mediation of Christ	"	24	"
Hymns	16mo	32	"
Lessons on the Orrery	"	32	"
The Two Lambs	32mo	52	"
Reader	12mo	308	"
Tr. on Self-Examination	16mo	48	"
School Cards	Folio	60	1841
Absurdities of Deism	8vo	16	"
Bible Questions	12mo	254	"
Infant School Manual	"	132	"
Synopsis of Sacred History	"	36	"
Epitome of the Gospel	"	68	"
Christian Instruction	16mo	20	"
Dialogue on New Heart	32mo	68	"
Sailor Boy and his Bible	"	20	"
The Falsehood	"	20	"
Dialogue on the Lord's Prayer		20	"

Greek.	Size.	Pages.	Year.
Sermon on the Mount	64mo	68	1841
Mother's Manual	16mo	264	1842
Payson's Thoughts	"	180	"
Woodbridge's Geography	12mo	296	1843
Good Works	8vo	20	"
Balbaith's Confession	16mo	80	"
Faded Leaf	32mo	60	"
Barth's Church History	12mo	354	1848
Hymn-Book	16mo	100	1854
Church Music	8vo	52	1858
Tract, "Salvation"	12mo	8	1860
Picture Cards. Words of Wisdom	48mo	8	1880

Printing Done at Athens.	Size.	Pages.	Year.
Jonas King's Defense before the Areopagus in 1846.			
Jonas King's Exposition of an Apostolic Church		54	
Jonas King's Religious Rites of an Apostolic Church		96	
Jonas King's Canons of Interpretation.			
Jonas King's Orgies of Simonides.			
Jonas King's Answer to the Greek Synod.			
Jonas King's Opinion of Twelve Lawyers, etc.			
Jonas King's Miscellany	8vo	843	1859
" " Sermons	"		"
Saint's Rest	8vo	657	1839
Prayers of the Saints	16mo		
Bible of Divine Origin	"		1842
Gurney on the Sabbath	"		"
Alleine's Alarm	12mo		1841
Gallaudet's Natural Theology	16mo		1849
Mother at Home	12mo		1837
Life of Josiah	"		1840
Butler's Analogy		401	
Library of the Fathers		34	
Manual of Theology		136	
Foundations of History		319	
The Good Shepherd		32	
The Best Friend		32	
Practical Discourses		284	
Simple Lessons		92	
Call to the Unconverted		308	
Practical View		506	
Russian Tailor		20	
Peasant and his Guest		64	

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" "	16mo	264	1869
Tract, "Good Works" . .	12mo	28	1870
" "World to Come" .	"	8	"
Catechism (Jones)	"	246	"
Tract, "Bridge"	"	8	1872
" "Blot Out My Sins"	"	4	1873
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" "First Step" . . .	"	4	1875
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Bulgarian.	Size.	Pages.	Year.
Friendly Counsels to Parents	"	32	1842
Tree of Intemperance . .	"	12	"
Something for the Unlearned	16mo	36	1843
Child's Book on the Soul. Part I	12mo	61	1844
Child's Book on the Soul. Part II	"	100	1852
Tract, "Poor Joseph" . .	"	12	1858
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Tract on "Way of Salvation"	"	8	1859
Eng. and Bul. Grammar .	8vo	110	"
Tract Primer	12mo	132	1860
Tract, "Self-Examination"	"	34	"
" "Good Works" . .	"	29	"
" "The Two Lambs" .	"	20	"
" "Conversation with Young Traveler" . . .	"	19	"
Tract, "A Church in Every House"	"	16	"
Tract, "Basil, the Pious Child"	"	12	"

Bulgarian.	Size.	Pages.	Year.
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Tract, "On Salvation" . .	"	8	"
Ten Commandments . . .	"	1	"
Bul. and Eng. Vocabulary .	8vo	252	"
Tract, "First Step" . . .	12mo	8	1861
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Pope and the Roman Church	"	78	"
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The Lord's Prayer . . .	"	12	"
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Cross of Christ	"	24	"
On Lying	"	8	"
Catechism (Jones)	"	264	"
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Green Pastures for the Lord's Flock. 8vo, pp. 392. 1855.
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Commentary on Genesis. 12mo. 1867. By J. Perkins, D.D.
Commentary on Exodus. 12mo. 1869. By J. Perkins, D.D.
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Temperance Repository. Quarterly. 1851 to 1854.
Indian Evangelical Review. English. Quarterly. At Bombay from 1873 to 1879.
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Dr. Schaff's Evan. Catechism. 1881.	" "	" " " " "

For Scriptures see page 239.

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The following statements, differing somewhat from those on page 211, are taken from an article by Mr. Hoyt, in the *Chinese Recorder*, for 1879, page 206: The A. B. C. F. M. established the first mission press in China. It was sent out in 1831, and was at work in 1832 at Canton, and at first printed only with English type. Mr. S. W. Williams had charge of it from 1833 to 1856. It was afterwards removed to Peking. Fifty-seven different publications were issued previous to 1878, varying in size from a tract to an 8vo Bible. See, also, page 427.

JAPANESE.

Title.	Year.	Translators.
Gospel of John. Singapore . . .	1838	Rev. C. Gutzlaff.
" " Matthew. Japan . . .	1871	Rev. — Goble.
" " Mark and John. Japan .	1872	Rev. J. C. Hepburn.
" " Matthew. Japan . . .	1873	" " " "
" " Luke. Japan	1875	Missionary Committee; viz., Drs. Hepburn, Brown, Greene and Maclay.
Epistle to Romans. "	1876	Missionary Committee, as above.
Matthew, Mark, Acts, Hebrews, and Epistles of John. Japan . . .	1877	" " " "
John, Corinthians, Galatians. Japan	1878	" " " "
Ephesians, Philippians, Thessalon'ns	1879	" " " "
Philemon, James, Peter, Jude, Colossians and Revelation	1880	" " " "
New Testament.* 12mo, 744 pp. . .	"	" " " "
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" " Luke	1878	M. L. Gordon.
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Statement of Christian Truth. Tract	"	" " " and others.
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Church History		J. D. Davis.
Shichi Ichi Zappo. Weekly . . .		O. H. Gulick, Editor.

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John	A. Thurston	Rochester, N. Y.	1828
Acts	W. Richards	Honolulu	1829
Romans	A. Thurston and A. Bishop	"	1831
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II Corinthians	A. Thurston	"	"
Galatians and Philemon	A. Thurston and A. Bishop	"	"
Colossians and Hebrews	H. Bingham	"	1832
James	W. Richards and L. Andrews	"	"
Peter, Epistles of	W. Richards	"	"
John and Jude, Epistles of . . .	W. Richards and L. Andrews	"	"
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*This was printed in three editions, viz., Katakana Majiri, Hirakana Majiri, being different forms of Japanese type, and a third in which the Chinese character was written on one side of the Hirakana.

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Joshua	W. Richards.	"	"
Judges and Ruth	" "	"	1835
I Samuel	A. Thurston.	"	"
II Samuel	A. Bishop.	"	"
I Kings	H. Bingham and E. W. Clark.	"	1838
II Kings	A. Thurston.	"	"
I Chronicles	A. Bishop.	"	"
II Chronicles	J. S. Green.	Lahaina.	1836
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First Teacher	16mo	16	1835	Many.	" "
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Hymn-Book. 1865. 32 " 16mo. And a Church Manual. 1866. 13 pp. 12mo.

* In 1874 a quarterly newspaper was issued; additional hymns were printed; a book of Bible stories, an almanac, and a new geography. In 1877, forty-five new hymns, and forty-seven additional pages of geography. In 1878, Genesis and Galatians; also a common and a large arithmetic.

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Geography.	" " " " "	"	24 "	"	

Primer. By Mrs. Sturges. 1867. 60 pp. 12mo.

Most of these Micronesian publications are taken from a list by Dr. L. H. Gulick, in Dr. Anderson's *Sandwich Islands*, pp. 397–400.

INDIAN DIALECTS.

	Year.	Pages.	Place.
Cherokee: Spelling-Book.* By Rev. D. S. Butterick			New Echota.
Hymns. Five editions	1829–1836	36 to 52	" "
Scripture Extracts	1831	12	" "
Poor Sarah	1833	12	" "
On Temperance	"		" "
The Duties of the Married	"		" "
Select Scriptures	1836	24	Union.
Almanac	"	16	"
Matthew and Acts.† By S. A. Worcester	1829 and 1833	124	New Echota.
Matthew, Acts and John.			
Epistles, etc.	1840–1843		Park Hill.
Matthew. Fourth and fifth editions	1844 and 1850	120	" "
New Testament	1850		" "
Luke	"	134	" "
John. Fourth edition	1854	93	" "
Acts	?	114	?
Romans	?	55	?
Corinthians, Galatians, Ephesians	1858	125	Park Hill.
Philippians, Colossians, Thessalonians	?	43	?
I and II Timothy	?	24	?
Titus, Philemon, Hebrews	?	49	?
James. Second edition	1850	16	Park Hill.
I and II Peter. Second edition	?	24	?
Epistles of John	?	16	?
Jude and Revelation	?	66	?
Genesis	1856	173	Park Hill.
Exodus	1853	152	" "
New Testament	1860		A. B. S., New York.

* *Missionary Herald*, 1836, p. 269.

† For this information about versions of Scripture the reader is indebted to Rev. E. W. Gilman, D.D., A. B. S., New York.

INDIAN DIALECTS. — Continued.

	Year.	Pages.	Place.
Creek: Assistant	1834	101	Boston.
Sermon and Hymns	1835	35	"
Child's Book	"	24	Union.
Osage: First Book	1834	126	Boston.
Seneca: Spelling-Book	1829		Buffalo, New York.
Two Hymn-Books	"		" " "
Luke	1830		New York.
Sermon on the Mount and Hymns	"		" "
Abenaquis: Spelling and Reading-Book	"	90	Boston.
Tracts	"	36	"
Ojibwa: Spelling-Book	1833	72	Utica, New York.
" "	1836	107	Boston.
Old Testament Stories	"	72	"
Gallaudet's Reading-Book and New Testament Stories	"	124	"
Hymns	"	40	"
Choctaw: Spelling-Book	1825	84	Cincinnati.
Reading-Book	"	64	"
Spelling-Book	1827	15	Greensboro', Ala.
Second Reading-Book	"	144	Cincinnati.
Spelling-Book. Enlarged	"	160	"
Hymns. Two editions	1829 and 1833	84	Boston.
Old Testament History. Illustrated	1831	157	Utica, New York.
Parts of Luke and John. "	"	152	" " "
History of Joseph. "	"	48	" " "
On the Sabbath	1834	18	Boston.
Spelling-Book. Illustrated	1835	72	"
Arithmetic	"	72	"
On the Family	"	48	"
Watts' Catechism	1836	16	"
Almanac	"	16	Union.
Friend	1836 12mo		"

The writer is indebted to Rev. S. R. Riggs, D.D., LL.D., for the following list of publications in the language of the Dakota or Sioux Indians:

Spelling-Book. 12mo. 22 pp. 1836. Crocker & Brewster: Boston.

Dr. Watts' Catechism. 12mo. 23 pp. 1837. By J. Renville and Dr. Williamson. Crocker & Brewster: Boston.

First Reading-Book. 18mo. 50 pp. 1839. By G. H. Pond and S. R. Riggs. Kendall & Henry: Cincinnati.

History of Joseph. " 40 " " " G. H. and S. W. Pond. Kendall & Henry: Cincinnati.

Old Testament Extracts. " 120 " " " J. Renville and T. S. Williamson. Kendall & Henry: Cincinnati.

Gospel of Mark. " 96 " " " J. Renville and T. S. Williamson. Kendall & Henry: Cincinnati.

Wowepi Mitowe. My Own Book. 12mo. 64 pp. 1842. By S. R. Riggs. Crocker & Brewster: Boston.

Second Reader. 18mo. 54 pp. 1842. By S. W. Pond. Crocker & Brewster: Boston.

Hymn-Book. " 97 " " " " " "

Ten Commandments " " " " "

Eliza and Sarah. 12 " " " Mrs. S. R. Riggs. " " " "

Genesis, Part of Psalms, Luke, and John. 12mo. 295 pp. 1842. By J. Renville, T. S. Williamson, G. H. Pond, and S. R. Riggs. Kendall & Henry: Cincinnati.

Acts, Paul's Epistles, and Revelation. 12mo. 228 pp. 1842. By S. R. Riggs. Kendall & Henry: Cincinnati.

Catechism. 12mo. 12 pp. By S. W. Pond. Hitchcock & Stafford: New Haven.

Dakota Lessons. " 96 " 1850. By S. R. Riggs and R. Hopkins. Louisville, Ky.

Grammar and Dictionary. 4to. 412 pp. 1852. By S. R. Riggs. R. Craighead: New York.

Eng. and Dak. Vocabulary. 8vo. 120 " " " " " and M. A. L. Riggs. R. Craighead: New York.

Hymns and Tunes. 12mo. 96 " 1856. " " " Riggs. Am. Tract Soc.: New York.

Pilgrim's Progress. 16mo. 264 " 1858. " " " " " " " " "

Hymn-Book. 24mo. 184 " 1863. " " " " and J. P. Williamson. Am. Tract Soc.: New York.

Precept upon Precept. 18mo. 228 " 1864. " J. B. Renville. Am. Tract So.: Boston.

Primer. 12mo. 64 " 1865. " S. R. Riggs. " " " N. Y.

Oowa Wowapi. " 72 " " " J. P. Williamson. " " " "

Catechism. 16mo. 36 " " " S. R. Riggs. " " " "

New Testament. 12mo. 408 " " " " " " Am. Bible So. "

English-Dakota Vocab. " 134 " 1871. " J. P. Williamson. Mission Press: Santee Agency.

Who is He? Illustrated. Folio. 8 " 1871. " S. R. Riggs. Chicago.

Model First Reader. Diglott. 12mo. 112 pp. 1873. By S. R. Riggs. Sherwood & Co.: Chicago.

Guyot's Elementary Geography. 4to. 90 pp. 1876. By S. R. and A. L. Riggs. Scribner, Armstrong & Co.: New York.

The Word Book. 12mo. 50 pp. 1877. By A. L. Riggs. American Tract Society: N. Y.

Bible. 12mo. 1693 pp. 1879. By T. P. Williamson and S. R. Riggs. American Bible Society: New York.

The Dakota Friend. Periodical. 1851 and 1852. By G. H. Pond.

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